LG

LS-L1260CL

MODEL

SERVICE MANUAL

Functions

Indoor Unit

Operation ON/OFF by Remote controller

Sensing the Room Temperature

• Room temperature sensor. (THERMISTOR)

Room temperature control

• Maintains the room temperature in accordance with the Setting Temp.

Starting Current Control

• Indoor fan is delayed for 5 sec at the starting.

Time Delay Safety Control

• Restarting is inhibited for approx. 3 minutes.

Indoor Fan Speed Control

• High, Med, Low, CHAOS

Operation indication Lamps (LED)

⏻ --- Lights up in operation
☆ --- Lights up in Sleep Mode
◷ --- Lights up in Timer Mode
✳ --- Lights up in Defrost Mode (for Heating Model)
OUTDOOR --- Lights up in compressor operation (for Cooling Model)

Soft Dry Operation Mode

• Intermittent operation of fan at low speed.

Sleep Mode Auto Control

• The fan is switched to low(Cooling), med(Heating) speed.
• The unit will be stopped after 1, 2, 3, 4, 5, 6, 7 hours.

Natural Air Control by CHAOS Logic

• The fan is switched to intermittent or irregular operation
• The fan speed is automatically switched from high to low speed.

Airflow Direction Control

• The louver can be set at the desired position or swing up and down automatically.

Defrost(Deice) control (Heating)

ƒU Both the indoor and outdoor fan stops during defrosting.

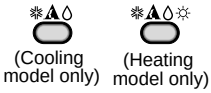
Hot-start Control (Heating)

ƒU The indoor fan stops until the evaporator pipe temperature will be reached at 28°C.

Remote Controller

Operation ON/OFF

Operation Mode Selection



Cooling Operation Mode.(❄) Auto Operation Mode.(◭)

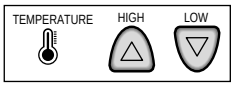
Soft Dry Operation Mode.(♢) Heating Operation Mode.(☼)

Fan Speed Selection

Room, Temperature Display

: (High: 39°C ◄——► LOW : 11°C)

Temperature Setting



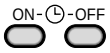
Cooling — Down to 18°C / Up to 30°C

Heating — Down to 16°C / Up to 30°C

JET COOL

Setting the Time or Timer

Timer Selection



: OFF, ON, OFF ◄——► ON

Timer Setting

Timer Cancel

: Cancel Sleep Mode, Timer ON or Timer OFF

Sleep Operation

: 1, 2, 3, 4, 5, 6, 7, Off Timer

Airflow Direction Control

Fan Operation Mode

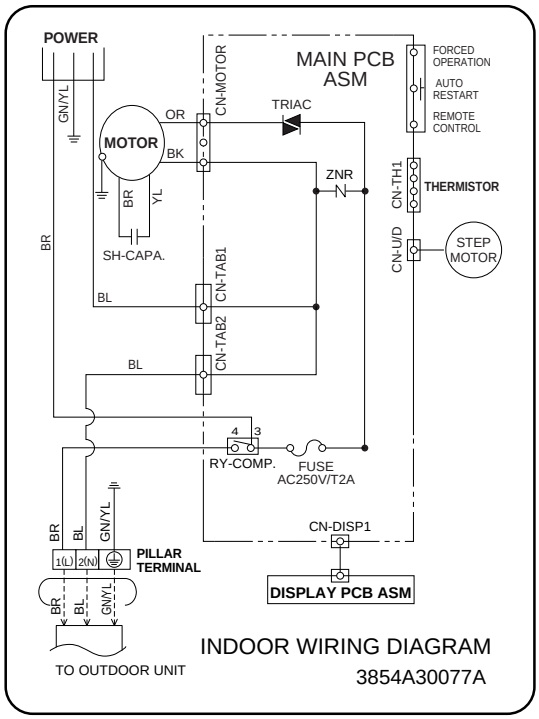
: Fan Operates without cooling or heating.

Reset

Wiring Diagram

(1) Indoor Unit

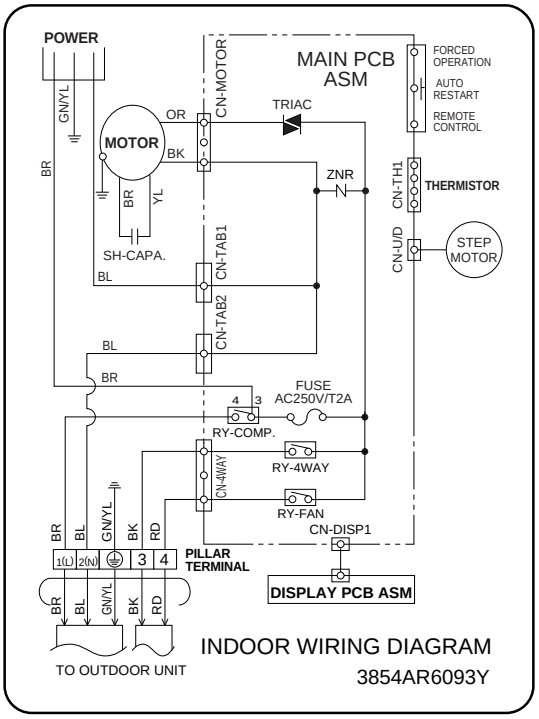
1. LS-L1260CL



INDOOR WIRING DIAGRAM

3854A30077A

2. LS-L1260HL



INDOOR WIRING DIAGRAM

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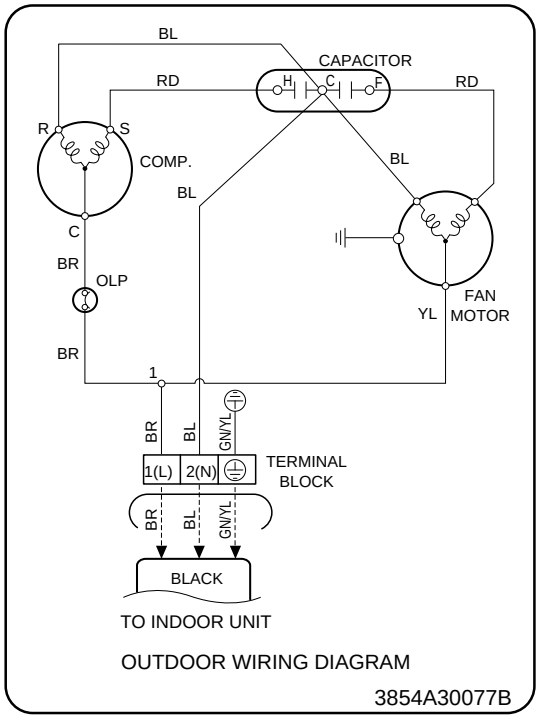
(2) Outdoor Unit

1. LS-L1260CL



OUTDOOR WIRING DIAGRAM

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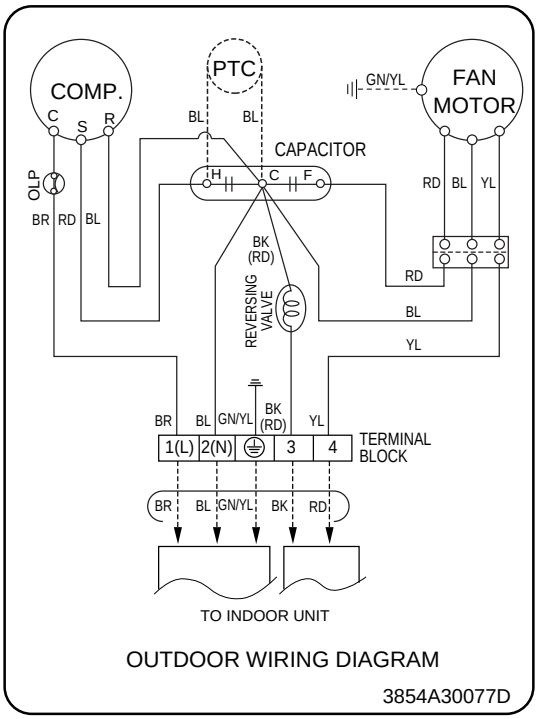
2. LS-L1260HL



OUTDOOR WIRING DIAGRAM

3854A30077D

Operation Details

1. MAIN UNIT FUNCTION

• DISPLAY

1) C/O Model

Operation Indicator

- On while in appliance operation, off while in appliance pause
- Flashing while in disconnection or short in Thermistor (3 sec off / 0.5 sec on)

Sleep Timer Indicator

- On while in sleep timer mode, off when sleep timer cancel or appliance operation pause

Timer Indicator

- On while in timer mode (on/off), off when timer mode is completed or canceled.

Comp. Running Incidator

- While in appliance operation, on while in outdoor unit compressor running, off while in compressor off

2) H/P Model

Operation Indicator

- On while in appliance operation, off while in appliance pause
- Flashing while in disconnection or short in Thermistor (3 sec off / 0.5 sec on)

Sleep Timer Indicator

- On while in sleep timer mode, off when sleep timer cancel or appliance operation pause

Timer Indicator

- On while in timer mode (on/off), off when timer mode is completed or canceled

Defrost Indicator

- Off except when hot start during heating mode operation or while in defrost control

■ Cooling Mode Operation

- When the intake air temperature reaches 0.5°C below the setting temp, the compressor and the outdoor fan stop.
- When it reaches 0.5°C above the setting temp, they start to operate again.

  Compressor ON Temp ➲ Setting Temp+0.5°C
  Compressor OFF Temp ➲ Setting Temp-0.5°C
- While in compressor running, operating with the airflow speed set by the remote control. While in compressor not running, operating with the low airflow speed regardless of the setting.

■ Healthy Dehumidification Mode

- When the dehumidification operation input by the remote control is received, the intake air temperature is detected and the setting temp is automatically set according to the intake air temperature.

  26°C ≤ Intake Air Temp ➲ 25°C
  24°C ≤ Intake Intake Air Temp<26°C ➲ Intake Air Temp-1°C
  18°C ≤ Intake Intake Air Temp<24°C ➲ Intake Air Temp-0.5°C
  Intake Air Temp<18°C ➲ 18°C

- While in compressor off, the indoor fan repeats low airflow speed and pause.
- While the intake air temp is between compressor on temp. and compressor off temp., 10-min dehumidification operation and 4-min compressor off repeat.
  Compressor ON Temp. ◌ Setting Temp+0.5°C
  Compressor OFF Temp. ◌ Setting Temp-0.5°C
- In 10-min dehumidification operation, the indoor fan operates with the low airflow speed.

■ Heating Mode Operation

- When the intake air temp reaches +3°…above the setting temp, the compressor is turned off. When below the setting temp, the compressor is turned on.
  Compressor ON Temp. ◌ Setting Temp.
  Compressor OFF Temp. ◌ Setting Temp.+3°C
- While in compressor on, the indoor fan is off when the indoor pipe temp. is below 20°C, when above 28°C , it operates with the low or setting airflow speed. When the indoor pipe temp is between 20°C and 28°C, it operates with Super-Low(while in sleep mode, with the medium airflow speed).
- While in compressor off, the indoor fan is off when the indoor pipe temp is below 33°C, when above 35°C , it operates with the low airflow speed.
- If overloaded while in heating mode operation, in order to prevent the compressor from OLP operation, the outdoor fan is turned on/off according to the indoor pipe temp.
- While in defrost control, both of the indoor and outdoor fans are turned off.

■ Defrost Control

- While in heating mode operation in order to protect the evaporator pipe of the outdoor unit from freezing, reversed to cooling cycle to defrost the evaporator pipe of the outdoor unit.
- After 40 min heating mode operation, at 4 min interval, whether to carry out defrost control or not and the time of defrost control are determined according to the following conditions.

1) While in heating mode operation, the maximum of the indoor pipe temperature is measured and it is compared with the present indoor pipe temperature to get the difference of the indoor pipe temperatures (=the maximum temperature of indoor pipe ? the present temperature of indoor pipe), according to which, whether to carry out defrost control or not is determined.
2) According to the need of defrost control shown above and the elapsed time of heating mode operation at that moment, the defrost control time is determined.
3) When the determined time of defrost control is below 7 min, heating mode operation continues without carrying out defrost control. According to the procedure stated above, the determination is made again. When the defrost control time is 7 min or longer, defrost control is then carried out.

- While in defrost control, the minimum temp of the indoor pipe is measured and it is compared with the present temp of the indoor pipe to get the difference of the indoor pipe temperatures (=the present temperature of the indoor pipe ? the minimum temperature of the indoor pipe). When the difference is 5°C or higher, defrost control is completed and heating mode operation is carried out.
- While in defrost control, if the defrost time determined before the start of defrost control is completed, defrost control stops and heating mode operation is carried out regardless of the above condition.
- When the indoor pipe temp is 42°C or above, defrost control is not carried out even if the condition is one of the defrost conditions above.
- While in defrost control, the compressor is on and the indoor fan, the outdoor fan, and the 4 way valve are off.

■ Fuzzy Operation (C/O Model)

- According to the temperature set by Fuzzy rule, when the intake air temp is 0.5°C or more below the setting temp, the compressor is turned off. When 0.5°C or more above the setting temp, the compressor is turned on.
  Compressor ON Temp ➲ Setting Temp + 0.5°C
  Compressor OFF Temp ➲ Setting Temp + 0.5°C
- At the beginning of Fuzzy mode operation, the setting temperature is automatically selected according to the intake air temp at that time.
  26°C ≤ Intake Air Temp ➲ 25°C
  24°C ≤ Intake Air Temp < 26°C ➲ Intake Air Temp + 1°C
  22°C ≤ Intake Air Temp < 24°C ➲ Intake Air Temp + 0.5°C
  18°C ≤ Intake Air Temp < 22°C ➲ Intake Air Temp
  Intake Air Temp<18°C ➲ 18°C

- When the Fuzzy key (Temperature Control key) is input after the initial setting temperature is selected, the Fuzzy key value and the intake air temperature at that time are compared to select the setting temperature automatically according to the Fuzzy rule.
- While in Fuzzy operation, the airflow speed of the indoor fan is automatically selected according to the temperature.

■ Fuzzy Operation (H/P Model)

- When any of operation mode is not selected like the moment of the power on or when 3 hrs has passed since the operation off, the operation mode is selected.
- When determining the operation mode, the compressor, the outdoor fan, and the 4 way valve are off and only the indoor fan is operated for 15 seconds. Then an operation mode is selected according to the intake air temp at that moment as follows.
  24°C ≤ Inatake Air Temp ➲ Fuzzy Operation for Cooling
  21°C ≤ Inatake Air Temp<24°C ➲ Fuzzy Operation for Dehumidification
  Inatake Air Temp<21°C ➲ Fuzzy Operation for Heating
- If any of the operation modes among cooling / dehumidification / heating mode operations is carried out for 10 sec or longer before Fuzzy operation, the mode before Fuzzy operation is operated.

1) Fuzzy Operation for Cooling

- According to the setting temperature selected by Fuzzy rule, when the intake air temp is 0.5°C or more below the setting temp, the compressor is turned off. When 0.5°C or more above the setting temp, the compressor is turned on.
  Compressor ON Temp ➲ Setting Temp +0.5°C
  Compressor OFF Temp ➲ Setting Temp + 0.5°C
- At the beginning of Fuzzy mode operation, the setting temperature is automatically selected according to the intake air temp at that time.
  26°C≤ Intake Air Temp ➲ 25°C
  24°C≤ Intake Air Temp<26°C ➲ Intake Air Temp + 1°C
  22°C≤ Intake Air Temp<24°C ➲ Intake Air Temp + 0.5°C
  18°C≤ Intake Air Temp<22°C ➲ Intake Air Temp
  Intake Air Temp<18°C ➲ 18°C
- When the Fuzzy key (Temperature Control key) is input after the initial setting temperature is selected, the Fuzzy key value and the intake air temperature at that time are compared to select the setting temperature automatically according to the Fuzzy rule.
- While in Fuzzy operation, the airflow speed of the indoor fan is automatically selected according to the temperature.

2) Fuzzy Operation for Dehumidification

- According to the setting temperature selected by Fuzzy rule, when the intake air temp is 0.5°C or more below the setting temp, the compressor is turned off. When 0.5°C or more above the setting temp, the compressor is turned on.
  Compressor ON Temp ➲ Setting Temp + 0.5°C
  Compressor OFF Temp ➲ Setting Temp+0.5°C
- At the beginning of Fuzzy mode operation, the setting temperature is automatically selected according to the intake air temp at that time.
  26°C ≤ Intake Air Temp ➲ 25°C
  24°C ≤ Intake Air Temp<26°C ➲ Intake Air Temp+1°C
  22°C ≤ Intake Air Temp<24°C ➲ Intake Air Temp+0.5°C
  18°C ≤ Intake Air Temp<22°C ➲ Intake Air Temp
  Intake Air Temp<18°C ➲ 18°C
- When the Fuzzy key (Temperature Control key) is input after the initial setting temperature is selected, the Fuzzy key value and the intake air temperature at that time are compared to select the setting temperature automatically according to the Fuzzy rule.
- While in Fuzzy operation, the airflow speed of the indoor fan repeats the low airflow speed or pause as in dehumidification operation.

3) Fuzzy Operation for Heating

- According to the setting temperature selected by Fuzzy rule, when the intake air temp is 3°C or more above the setting temp, the compressor is turned off. When below the setting temp, the compressor is turned on.
  Compressor ON Temp ➲ Setting Temp
  Compressor OFF Temp ➲ Setting Temp + 3°C
- At the beginning of Fuzzy mode operation, the setting temperature is automatically selected according to the intake air temp at that time.
  20°C≤Intake Air Temp ➲ Intake Air Temp + 0.5°C
  Intake Air Temp<20°C ➲ 20°C
- When the Fuzzy key (Temperature Control key) is input after the initial setting temperature is selected, the Fuzzy key value and the intake air temperature at that time are compared to select the setting temperature automatically according to the Fuzzy rule.
- While in Fuzzy operation, the airflow speed of the indoor fan is set to the high or the medium according to the intake air temperature and the setting temperature.

■ Airflow Speed Selection

- The airflow speed of the indoor fan is set to high, medium, low, or chaos (auto) by the input of the airflow speed selection key on the remote control.

■ On-Timer Operation

- When the set time is reached after the time is input by the remote control, the appliance starts to operate.
- The timer LED is on when the on-timer is input. It is off when the time set by the timer is reached.
- If the appliance is operating at the time set by the timer, the operation continues.

■ Off-Timer Operation

- When the set time is reached after the time is input by the remote control, the appliance stops operating.
- The timer LED is on when the off-timer is input. It is off when the time set by the timer is reached.
- If the appliance is on pause at the time set by the timer, the pause continues.

■ Off-Timer <=> On-Timer Operation

- When the set time is reached after the on/off time is input by the remote control, the on/off-timer operation is carried out according to the set time.

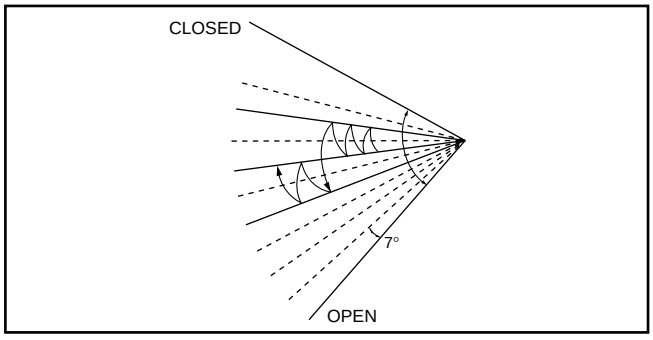
■ Sleep Timer Operation

- When the sleep time is reached after <1,2,3,4,5,6,7,0(cancel) hr> is input by the remote control while in appliance operation, the operation of the appliance stops.
- While the appliance is on pause, the sleep timer mode cannot be input.
- While in cooling mode operation, 30 min later since the start of the sleep timer, the setting temperature increases by 1°C. After another 30 min elapse, it increases by 1°C again.
- When the sleep timer mode is input while in cooling cycle mode, the airflow speed of the indoor fan is set to the low.
- When the sleep timer mode is input while in heating cycle mode, the airflow speed of the indoor fan is set to the medium.

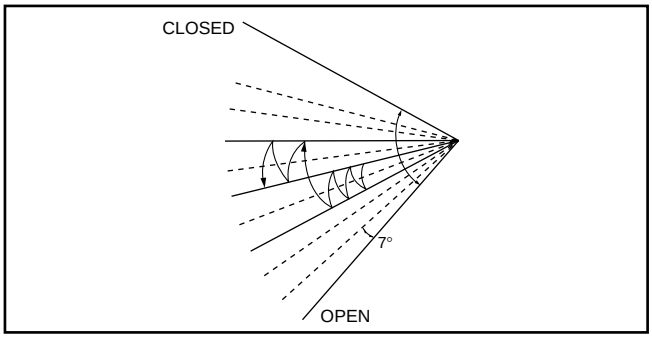
■ Chaos Swing Mode

- By the Chaos Swing key input, the upper/lower vane automatically operates with the Chaos Swing or they are fixed to the desired direction.
- While in Chaos Swing mode, the angles of cooling and heating cycle operations are different.

< Cooling Mode >



< Heating Mode >



■ Chaos Natural Wind Mode

- When the Chaos Natural Wind mode is selected and then operated, the high, medium, or low speed of the airflow mode is operated for 2~15 sec. randomly by the Chaos Simulation.

■ Jet Cool Mode Operation (C/O Model)

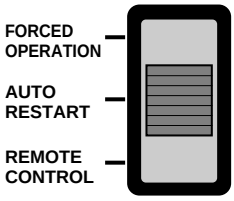
- If the Jet Cool key is input at any operation mode while in appliance operation, the Jet Cool mode operates.
- In the Jet Cool mode, the indoor fan is operated at super-high speed for 30 min at cooling mode operation.
- In the Jet Cool mode operation, the room temperature is controlled to the setting temperature, 18°C
- When the sleep timer mode is input while in the Jet Cool mode operation, the Jet Cool mode has the priority.
- When the Jet Cool key is input, the upper/lower vanes are reset to those of the initial cooling mode and then operated in order that the air outflow could reach further.

■ Jet Cool Mode Operation (H/P Model)

- While in heating mode or Fuzzy operation, the Jet Cool key cannot be input. When it is input while in the other mode operation (cooling, dehumidification, ventilation), the Jet Cool mode is operated.
- In the Jet Cool mode, the indoor fan is operated at super-high speed for 30 min at cooling mode operation.
- In the Jet Cool mode operation, the room temperature is controlled to the setting temperature, 18°C.
- When the sleep timer mode is input while in the Jet Cool mode operation, the Jet Cool mode has the priority.
- When the Jet Cool key is input, the upper/lower vanes are reset to those of the initial cooling mode and then operated in order that the air outflow could reach further.

■ Auto Restarting Operation

- When the power is restored after a sudden power failure while in appliance operation, the mode before the power failure is kept on the memory and the appliance automatically operates in the mode on the memory.
- The slide switch on the main unit of the appliance should be on the Auto Restarting position in order that the Auto Restarting operation is available.
- Operation Mode that is kept on the memory
  - State of Operation ON/OFF
  - Operation Mode/Setting Temp/Selected Airflow Speed
  - Sleep Timer Mode/Remaining Time of Sleep Timer (unit of hour)
- If no input by the remote control or no switching of the slide switch within 7 hr after the appliance operates by the Auto Restarting operation, the appliance is forced to stop at the moment of 7-hr elapse.



Slide Switch

■ Forced Operation (C/O Model)

- To operate the appliance by force in case that the remote control is lost, the forced operation selection switch is on the main unit of the appliance to operate the appliance in the standard conditions.
- When the power is supplied while the slide switch is on the forced operation position, or when the slide switch position is switched to the Auto Restarting position (or test operation) or switched from the remote control position to the forced operation position while the power is on, the forced operation is carried out.
- When the slide switch position is switched from the forced operation position to the Auto Restarting position or the remote control position, the forced operation is canceled and the appliance stops operating.
- The forced operation is carried out in cooling mode with the setting temperature 22°C and the high speed of airflow.
- While in forced operation, the key input by the remote control has no effect and the buzzer sounds 10 times to indicate the forced operation.

■ Forced Operation (H/P Model)

- To operate the appliance by force in case that the remote control is lost, the forced operation selection switch is on the main unit of the appliance to operate the appliance in the standard conditions.
- When the power is supplied while the slide switch is on the forced operation position, or when the slide switch position is switched to the Auto Restarting (or test operation) position or switched from the remote control position to the forced operation position while the power is on, the forced operation is carried out.
- When the slide switch position is switched from the forced operation position to the Auto Restarting position or the remote control position, the forced operation is canceled and the appliance stops operating.
- The forced operation is carried out in cooling mode with the setting temperature 22°C and the high speed of airflow.
- In the forced operation mode, the indoor fan is operated at low speed for around 15 sec and then the operation condition is set according to the intake air temperature as follows.

  24°C≤Intake Air Temp ➲ Cooling Mode Operation, 22°C, High Speed
  21°C≤Intake Air Temp<24°C ➲ Dehumidification Operation, 23°C, High Speed
  Intake Air Temp<21°C ➲ Heating Mode Operation, 24°C, High Speed
- While in forced operation, the key input by the remote control has no effect and the buzzer sounds 10 times to indicate the forced operation.

■ Remote Control Operation Mode

- When the remote control is selected by the slide switch on the main unit, the appliance operates according to the input by the remote control.

■ Protection of the evaporator pipe from frosting

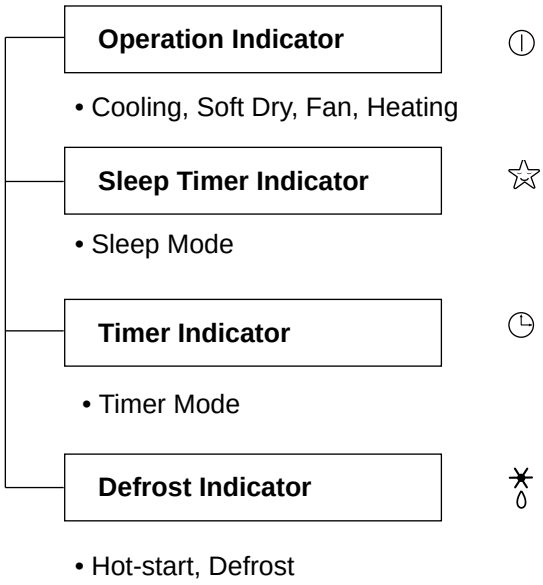
- If the indoor pipe temp is below 0°C in 7 min. after the compressor operates without any pause while in cooling cycle operation mode, the compressor and the outdoor fan are turned off in order to protect the indoor evaporator pipe from frosting.
- When the indoor pipe temp is 7°C or higher after 3 min. pause of the compressor, the compressor and the outdoor fan is turned on according to the condition of the room temperature.

■ Buzzer Sounding Operation

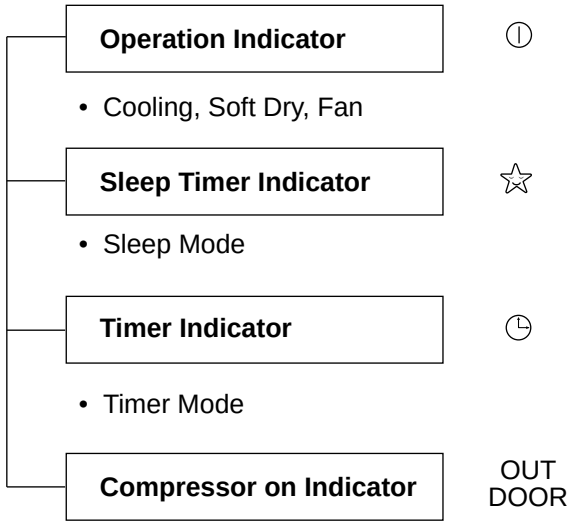
- When the appliance-operation key is input by the remote control, the short "beep-beep-" sounds.
- When the appliance-pause key is input by the remote control, the long "beep—" sounds.
- When a key is input by the remote control while the slide switch on the main unit of the appliance is on the forced operation position, the error sound "beep-beep-beep-beep-beep-" is made 10 times to indicate that the remote control signal cannot be received.

Display Function

1. Heating Model



2. Cooling Model



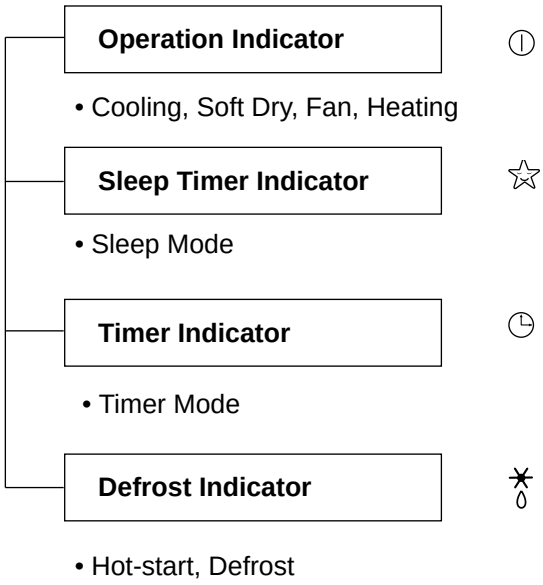
Self-diagnosis Function

■ Thermistor Error Indicator

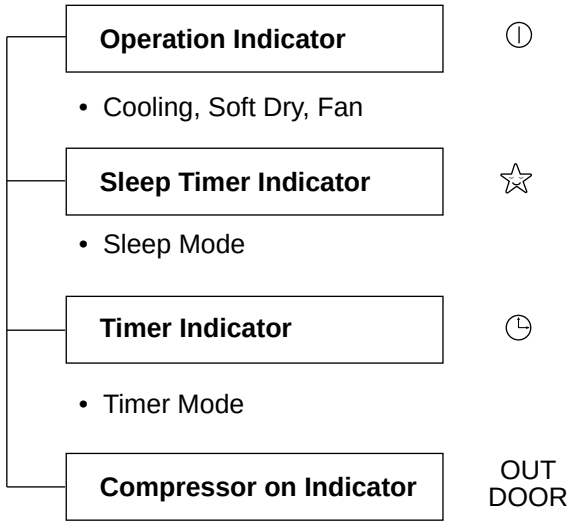
- When the indoor pipe sensor or the room temperature sensor is open or is shorted, the error is indicated.
- To indicate the error, the operation LED (or the cooling LED) flashed at 3 sec interval.
- When the error is cleared, the LED stops flashing, the operation (or cooling) LED is on.
- While in appliance pause, the error is not indicated.

Display Function

1. Heating Model



2. Cooling Model



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- To indicate the error, the operation LED (or the cooling LED) flashed at 3 sec interval.
- When the error is cleared, the LED stops flashing, the operation (or cooling) LED is on.
- While in appliance pause, the error is not indicated.

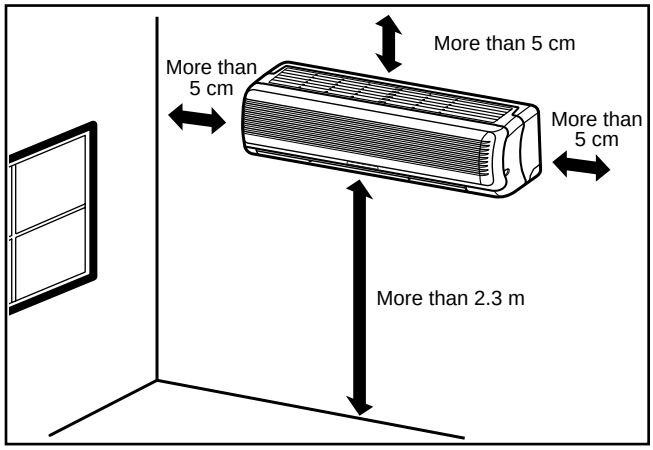
Installation

1. Installation of indoor, Outdoor unit

1) Selection of the best location

1. Indoor unit

- There should not be any heat source or steam near the unit.
- There should not be any obstacles to prevent the air circulation.
- A place where air circulation in the room will be good.
- A place where drainage can be easily obtained.
- A place where noise prevention is taken into consideration.
- Do not install the unit near the door way.
- Ensure the spaces indicated by arrows from the wall, ceiling, fence or other obstacles.

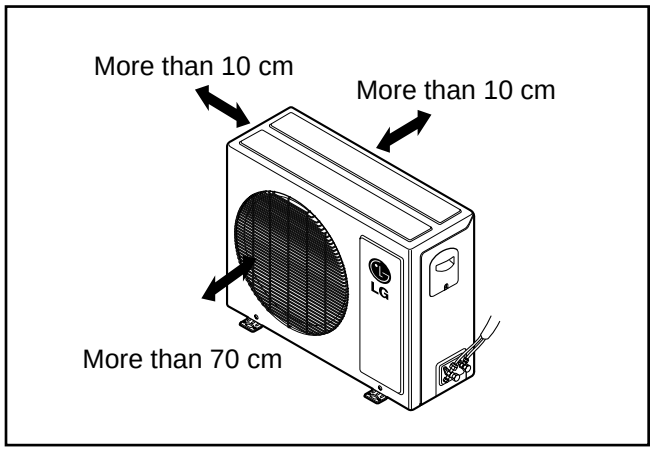


⚠CAUTION

Install the indoor unit on the wall where the height from the floor is more than 2.3 meters.

2. Outdoor unit

- If an awning is built over the unit to prevent direct sunlight or rain exposure, be careful that heat radiation from the condenser is not restricted.
- There should not be any animals or plants which could be affected by hot air discharged.
- Ensure the correct distance is left from the wall, ceiling, fence, or other obstacles as indicated in the diagram.

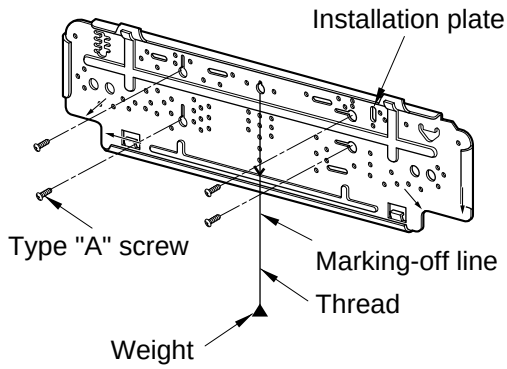


2) Indoor Unit Installation

The mounting wall should be strong and solid enough to protect it from the vibration.

1.Mount the installation plate on the wall with four Type "A" screws.
(if mounting the unit on the concrete wall, consider using anchor bolts.)

- Always mount the Installation plate horizontally by aligning the marking-off line by means of the thread and a level.

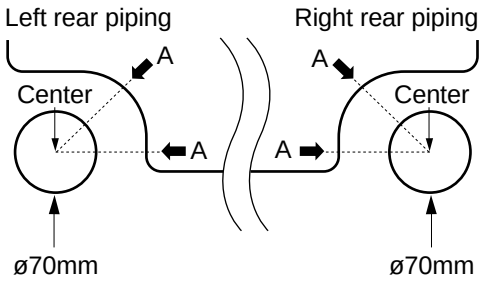


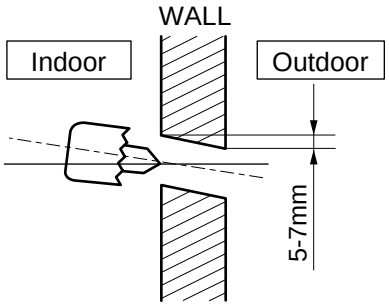
2. Drill the piping hole with 70mm dia. holecore drill.

- Line according to the arrows marked on lower the left and the right side of the Installation Plate. The meeting point of the extended line is the center of the hole.
- Drill the Piping hole at either the right or the left and the hole should be slightly slanted to the outdoor side.

The lower left and right side of Installation Plate

12K Btu



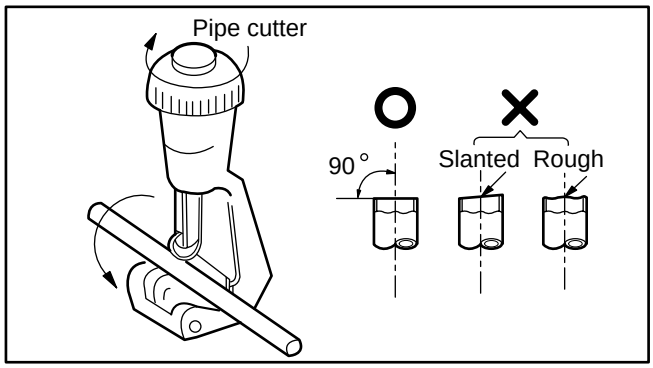


2. Piping and Drainage of Indoor Unit

1) Preparation of Piping

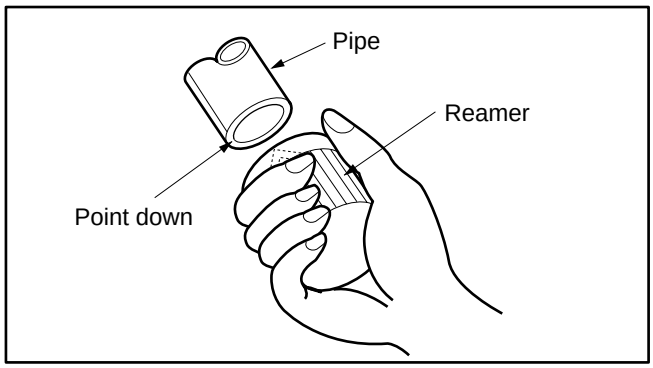
1. Cut the pipes and the cable.

- Use the accessory piping kit or the pipes purchased locally.
- Measure the distance between the indoor and the outdoor unit.
- Cut the pipes a little longer than measured distance.
- Cut the cable 1.5m longer than the length of the pipe.



2. Remove burrs.

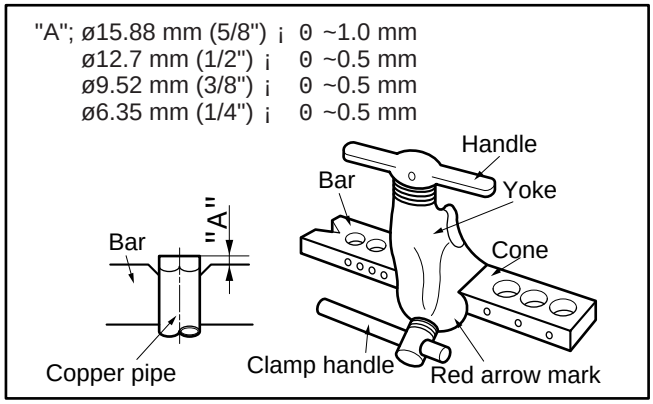
- Remove burrs from cut edges of pipes.
- Turn the pipe end toward down to avoid the metal powder entering the pipe.



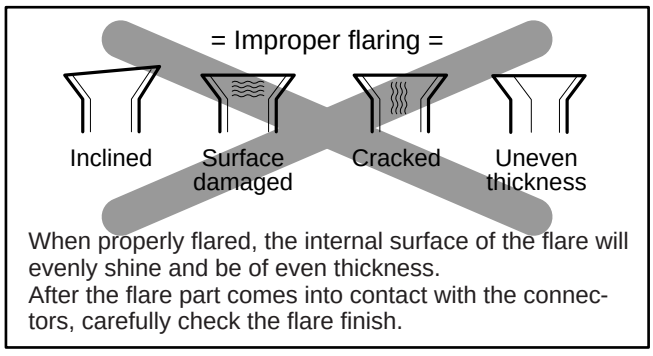
Caution:
If burrs are not removed, they may cause a gas leakage.

3. Flaring the pipes.

- Insert the flare nuts, mounted on the connection ports of both indoor and outdoor unit, onto the copper pipes. (When the flare nuts are removed from the indoor unit.) Some gas may leak, as some gas is charged to prevent the inside of the pipe from rusting.
- Fit the copper pipe end into the Bar of flare tool about 0~1.0mm higher. (See illustration)
- Flare the pipe ends.



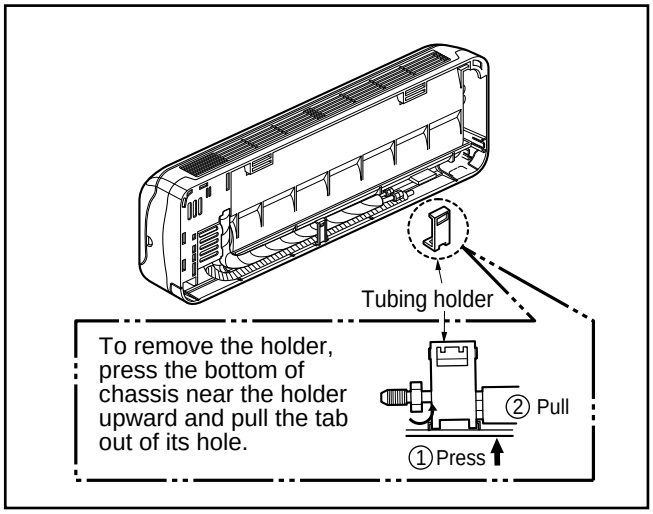
4. Tape the flaring portion to protect it from the dust or damages.



When properly flared, the internal surface of the flare will evenly shine and be of even thickness.
After the flare part comes into contact with the connectors, carefully check the flare finish.

2) Connection of Pipings

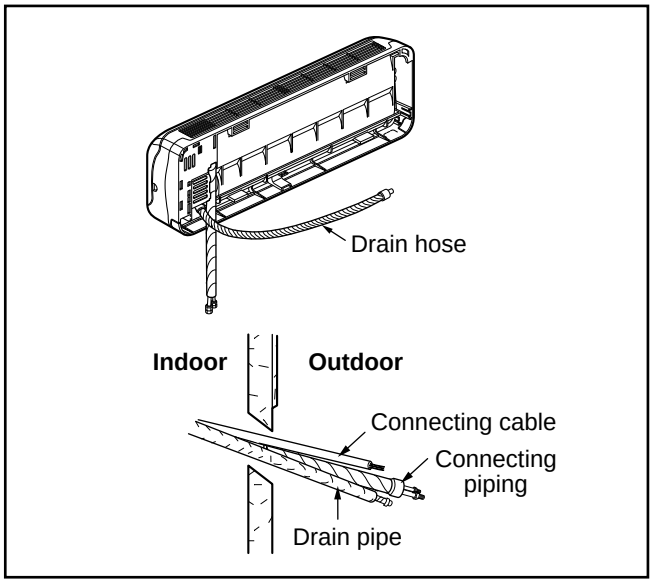
1. Remove the tubing holder.


Tubing holder
To remove the holder, press the bottom of chassis near the holder upward and pull the tab out of its hole.
② Pull
① Press

2. Route the drain hose and the indoor tubing.

For right rear piping

3. Insert the piping, the connecting cables and the drain pipe through the piping hole on the wall.

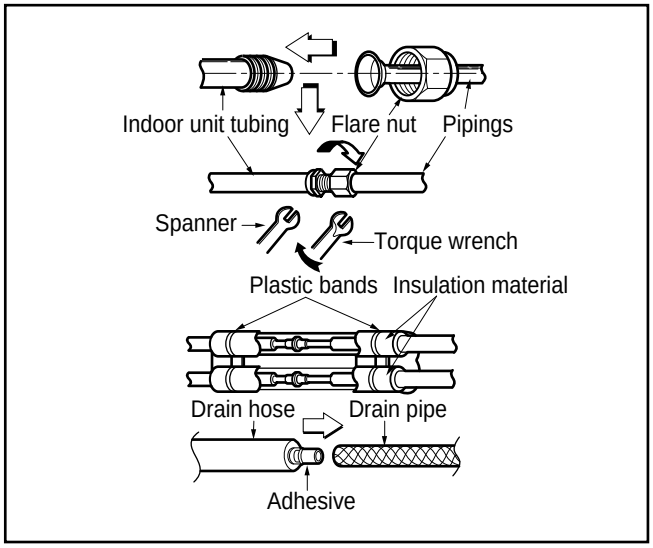


4. Connect the piping and the indoor tubing, and drain hose and drain pipe.

• Don't connect the cable to the indoor unit.

Pipe Size	Torque
Liquid Side (1/4")	1.8kg·m
Gas Side (3/8")	4.2kg·m
Gas Side (1/2")	5.5kg·m

• Wrap the insulation material around the connecting portion.

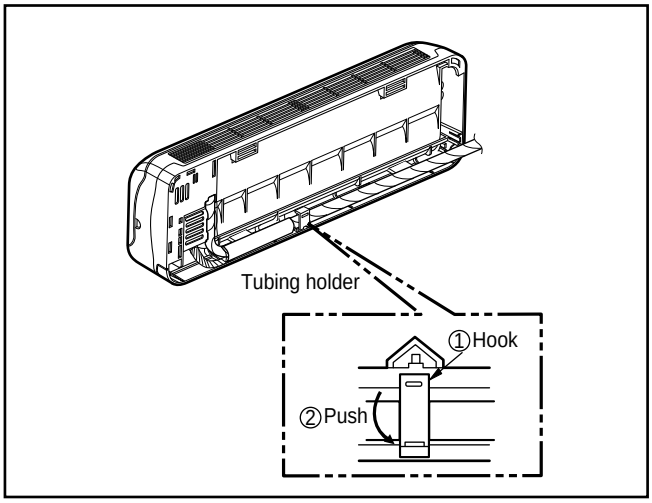


• Glue up the connection portion of drain hose and drain pipe.

5. Bend the tubing as shown in the figure and bind the piping, the connecting cables and the drain hose altogether.

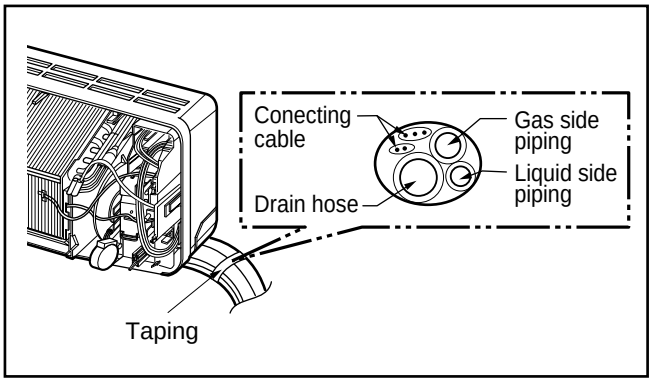
• Make a small loop for easy connection later.

6. Wrap the tubing, the drain hose and the connecting cable with tape.



7. Indoor unit installation

• Hook the indoor unit onto the upper portion of the installation plate. (Engage the two hooks of the rear top of the indoor unit with the upper edge of the installation plate.)
Ensure the hooks are properly seated on the installation plate by moving it in left and right.

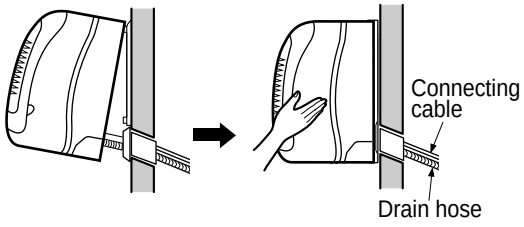


CAUTION

Take care to arrange the piping, drain hose and cables as the feature 7 page for inserting it into the indoor unit and mount the indoor unit on the installation plate.

CAUTION

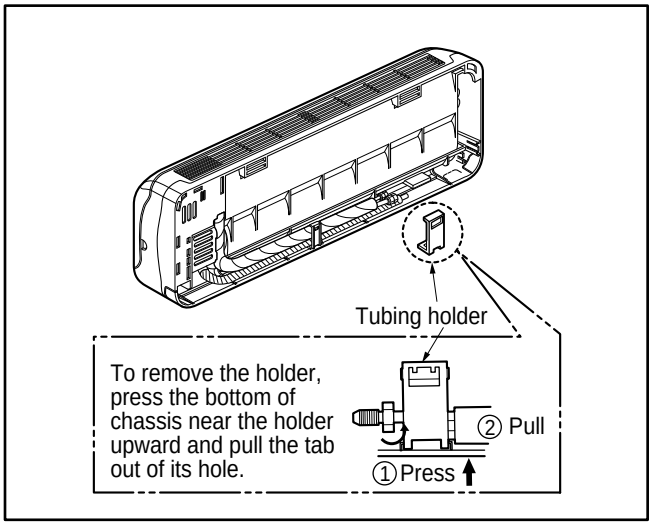
When install, make sure that the remaining parts must be removed clearly so as not to damage the piping and drain hose, especially power cord and connecting cable.



Press the lower left and right side of the unit against the Installation Plate until the hooks engage with their slots (sound click).

For left rear piping

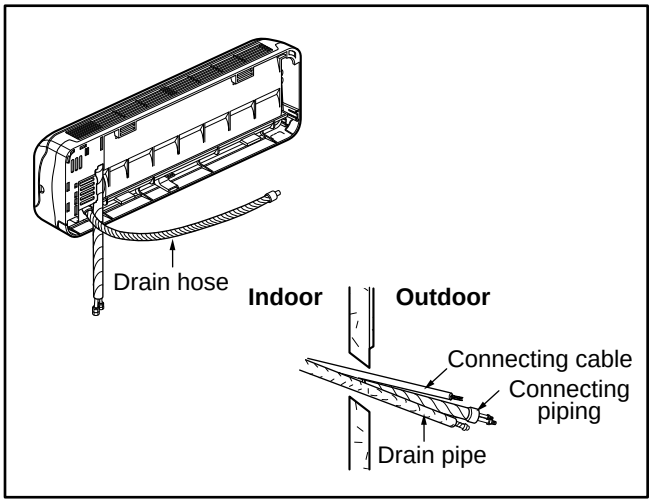
3. Insert the connecting cables, the drain pipe and connecting piping through the piping hole on the wall.


Tubing holder
To remove the holder, press the bottom of chassis near the holder upward and pull the tab out of its hole.
② Pull
①Press

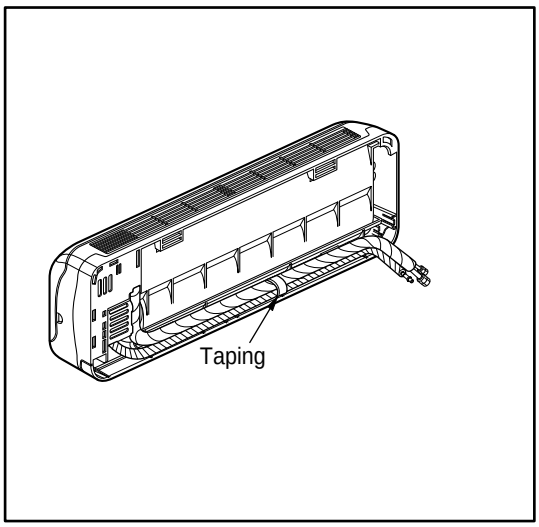
4. Connect the piping and the indoor tubing, and drain hose and drain pipe and place the drain pipe into the chassis.

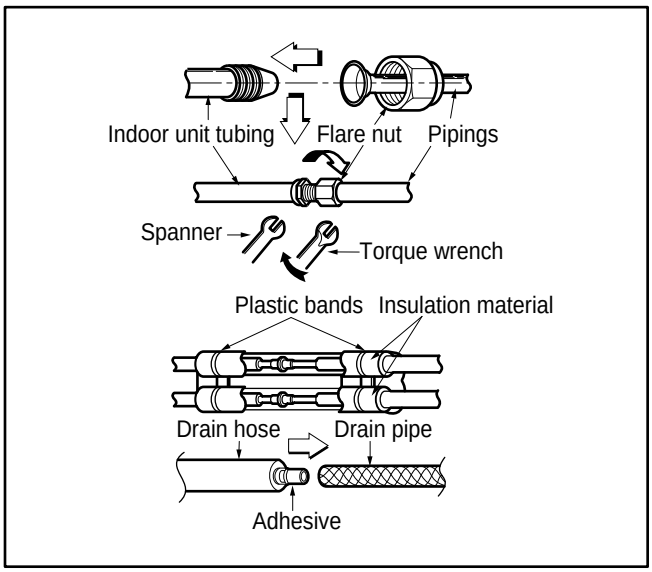
- Don't connect the cable to the indoor unit.
- Make a small loop for easy connection later.
- Glue up the connection portion of drain hose and drain pipe.

Pipe Size	Torque
Liquid Side (1/4")	1.8kg·m
Gas Side (3/8")	4.2kg·m
Gas Side (1/2")	5.5kg·m



5. Bend the drain hose and bind the drain hose, the piping and the connecting cables altogether.



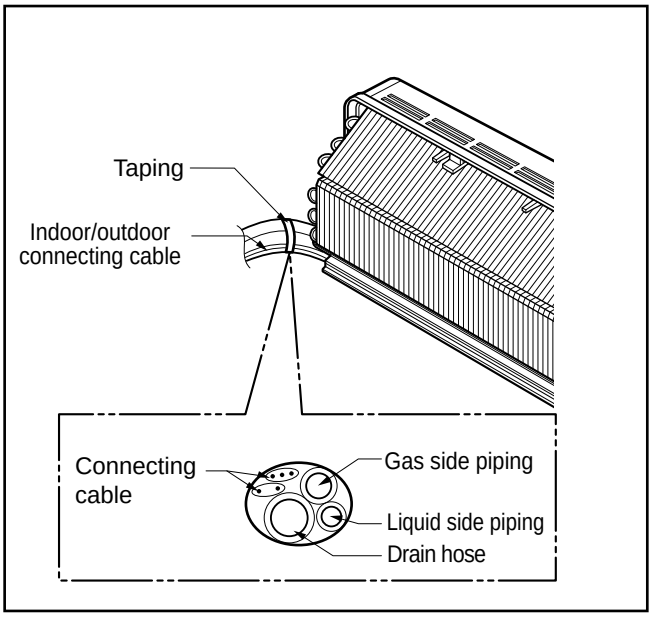


6. Wrap the insulation material around the connecting portion.

CAUTION

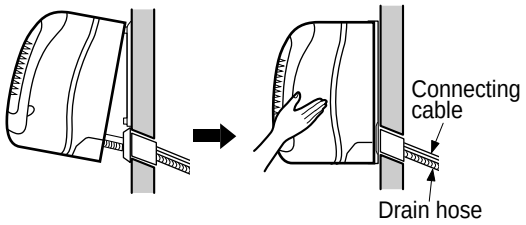
Take care to arrange the piping, drain hose and cables as the figure 7 page for inserting it into the indoor unit and mount the indoor unit on the installation plate.

7. Wrap the tubing, the drain hose and the connecting cable with tape.



8. Indoor unit installation

- Hook the indoor unit onto the upper portion of installation plate. (Engage the two hooks of the rear top of the indoor unit with the upper edge of the installation plate.)
  Ensure the hooks are properly seated on the installation plate by moving it left and right.



Press the lower left and right side of the unit against the Installation Plate until the hooks engage with their slots (sound click).

3. Connecting Piping and Cable to the outdoor unit

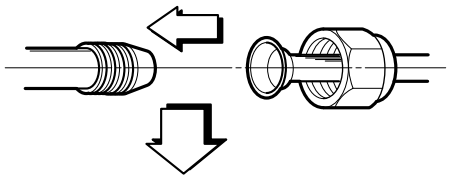
1) Connecting the piping to the Outdoor unit

1. Align the center of the piping and sufficiently tighten the flare nut with fingers.

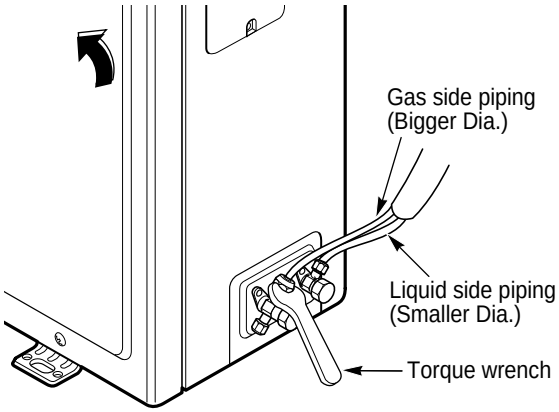
2. Finally, tighten the flare nut with torque wrench until the wrench clicks.

- When tightening the flare nut with torque wrench, ensure the direction for tightening follows the arrow on the wrench.

Pipe Size	Torque
Liquid Side (1/4")	1.8kg·m
Gas Side (3/8")	4.2kg·m
Gas Side (1/2")	5.5kg·m



Outdoor unit



CAUTION

After the confirmation of the above conditions, prepare the wiring as follows:

1) Never fail to have an individual power specialized for the air conditioner. As for the method of wiring, be guided by the circuit diagram pasted on the inside of control box cover.

2) Provide a circuit breaker switch between power source and the unit.

3) The screw which fasten the wiring in the casing of electrical fittings are liable to come loose from vibrations to which the unit is subjected during the course of transportation. Check them and make sure that they are all tightly fastened. (If they are loose, it could give rise to burn-out of the wires.)

4) Specification of power source.

5) Confirm that electrical capacity is sufficient.

6) See to it that the starting voltage is maintained at more than 90 percent of the rated voltage marked on the name plate.

7) Confirm that the cable thickness is as specified in the power sources specification. (Particularly note the relation between cable length and thickness.)

8) Never fail to equip a leakage breaker where it is wet or moist.

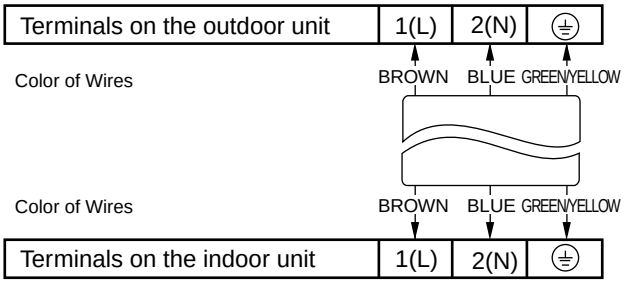
9) The following troubles would be caused by voltage drop-down.

- Vibration of a magnetic switch, damage on the contact point there of, fuse breaking, disturbance to the normal function of a overload protection device.
- Proper starting power is not given to the compressor.

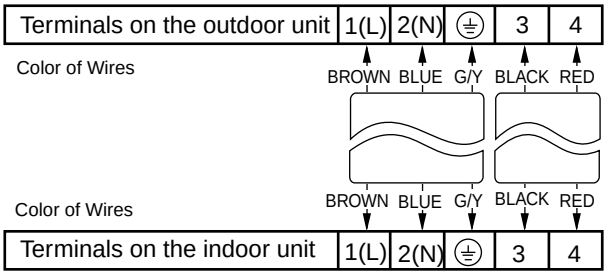
2) Connection of the cable

1. Remove the cover control from the unit by loosening the screw.
   Connect the wires to the terminals on the control board individually as the following.

1) Cooling only type

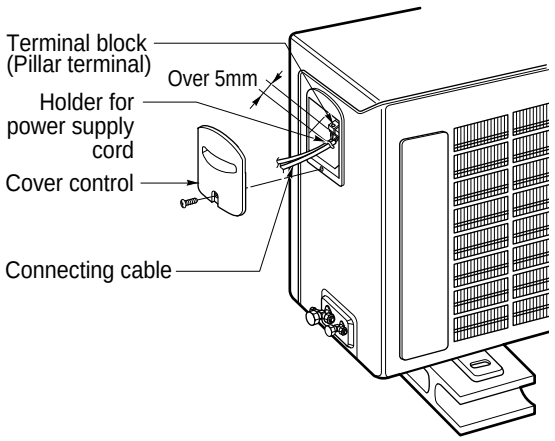


2) Cooling & Heating type



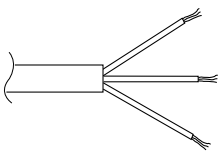
2. Secure the cable onto the control board with the holder (clamper).
3. Refix the cover control to the original position with the screw.
4. Use a recognized circuit breaker 16A between the power source and the unit. A disconnection device to adequately disconnect all supply lines must be fitted.

Outdoor unit



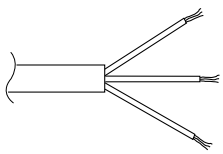
The length of the power supply cord should be over 1.8m measured from the power supply cord entry of the cabinet to the middle of the live pin of the plug.

The power cord connected to the indoor unit should be complied with the following specifications (Type H05VV-F approved by HAR or SA).



NORMAL CROSS-SECTIONAL AREA
1.0mm²

The connecting cable connected to the indoor and outdoor unit should be complied with the following specifications (Rubber insulation, type H07RN-F approved by HAR or SA).



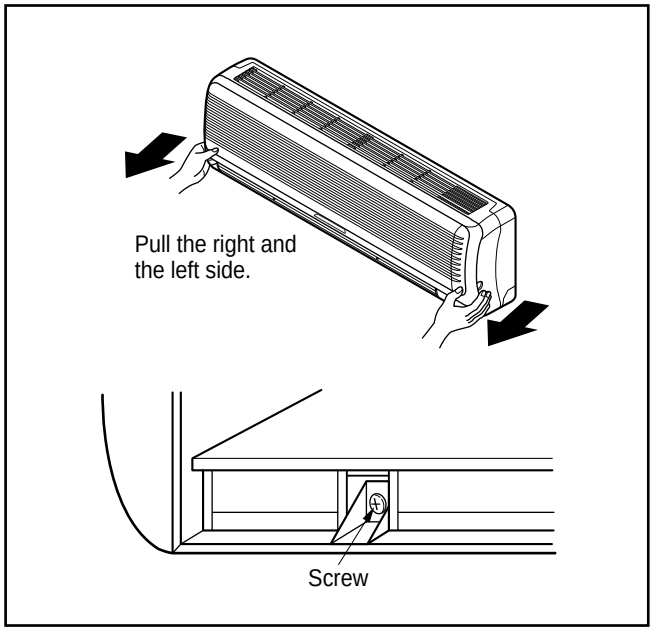
NORMAL CROSS-SECTIONAL AREA
1.0mm²

4. Checking the Drainage and Connecting the cable to Indoor unit

1) Checking the Drainage

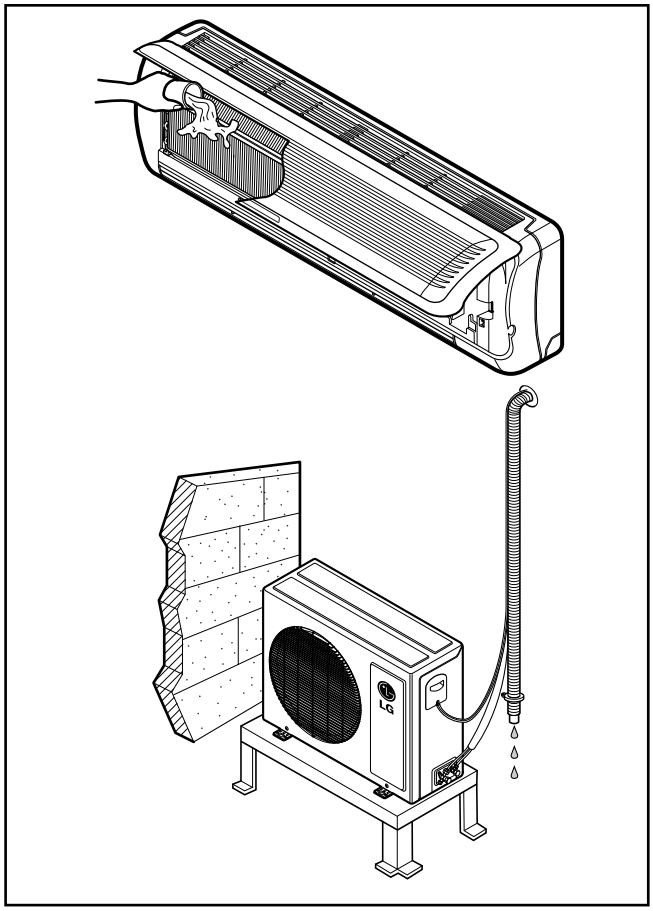
1. Remove the Grille from the cabinet.

- Set the up-and-down air direction louver to the open position (horizontally) by finger pressure.
- Remove the securing screws.
- To remove the Grille, pull lower the left and right side of the grille toward you (slightly tilted) and lift it straight upward (Two tabs on the top inside edge of chassis are clear of their slots).



2. Check the drainage.

- Pour a glass of water on the evaporator.
- Ensure if water flows drain hose of indoor unit without any leakage.

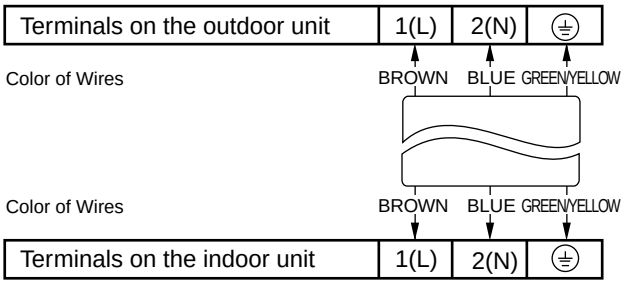


2) Connecting of the cable to the indoor unit

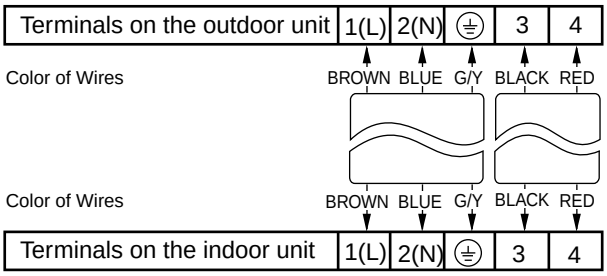
1. Connect the wires to the terminals on the control board individually according to the outdoor unit connection.

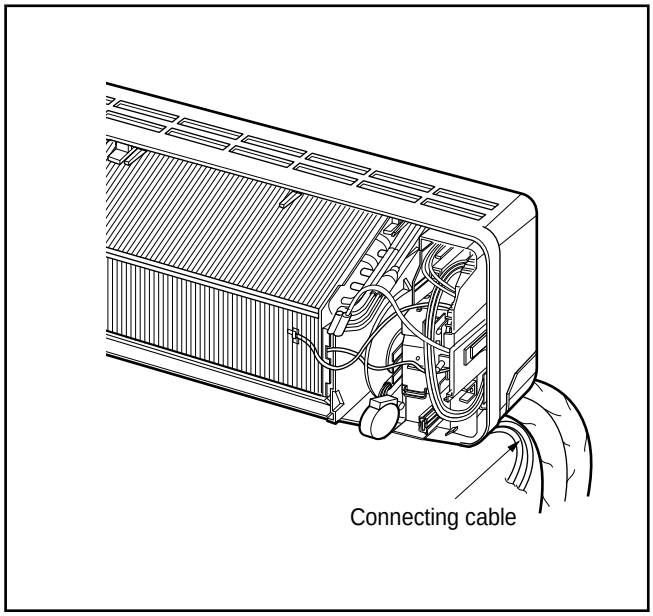
- Ensure that the color of the wires of outdoor unit and the terminal No. are the same as the indoor unit.

1) Cooling only type



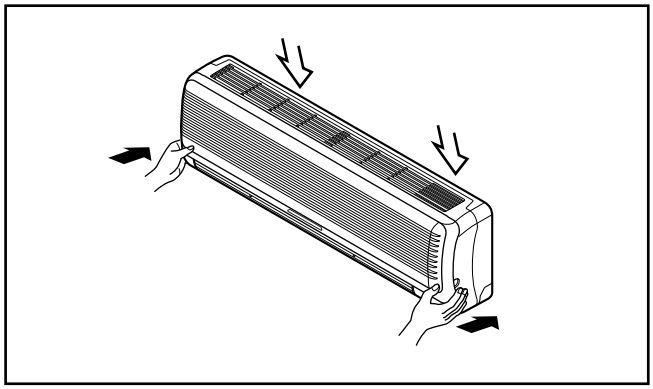
2) Cooling & Heating type





2. Attach the Grille onto the cabinet.

- Grasp lower the left and the right side of the Grille and engage two tabs on the top inside edge of the grille with two slots on the cabinet's top front edge.
- Press the Grille toward to the cabinet until it will be back into place.



3) Form the piping

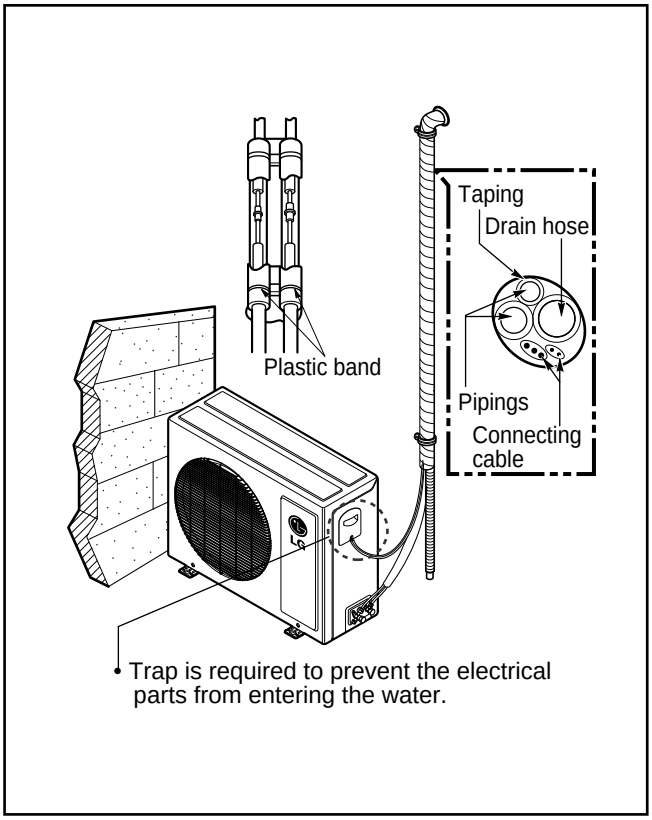
1. Wrap the connecting portion of indoor unit with the Insulation material and secure it with two Plastic Bands.(for the right piping)

- If you want to connect an additional drain hose, the end of the drain-outlet should be off the ground.(Do not dip it into water, and fix it on the wall to avoid swinging in the wind.)

In case of the Outdoor unit to be installed below the position of the Indoor unit.

2. Tape the Piping, drain hose and Connecting Cable from down to up.

3. Form the piping gathered by taping along the exterior wall and fix it onto the wall by saddle or equivalent.

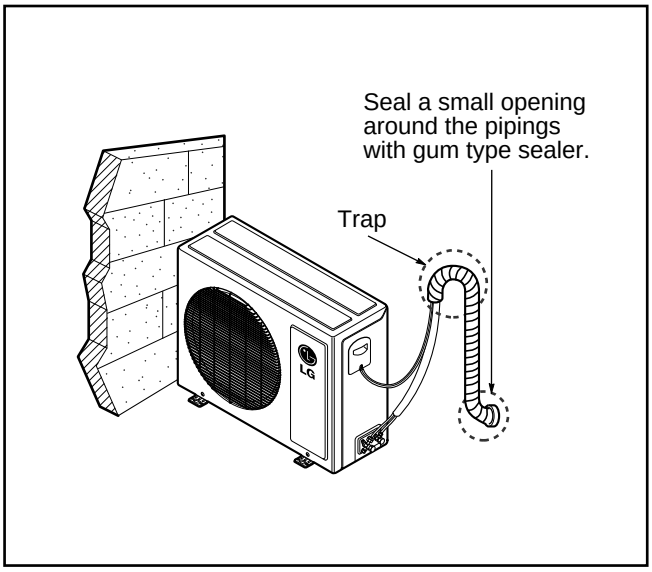


In case of the Outdoor unit being installed upper position of the Indoor unit.

2. Tape the Pipings and Connecting cable from down to up.

3. Form the pipings gathered by taping along the exterior wall, make the Trap to be required to prevent the room from entering the water.

4. Fix the pipings onto the wall by saddle or equivalent.



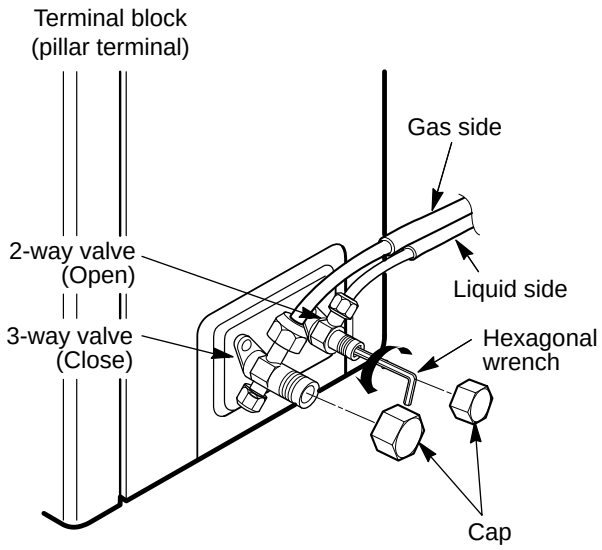
5. Air Purging of the Piping and Indoor Unit

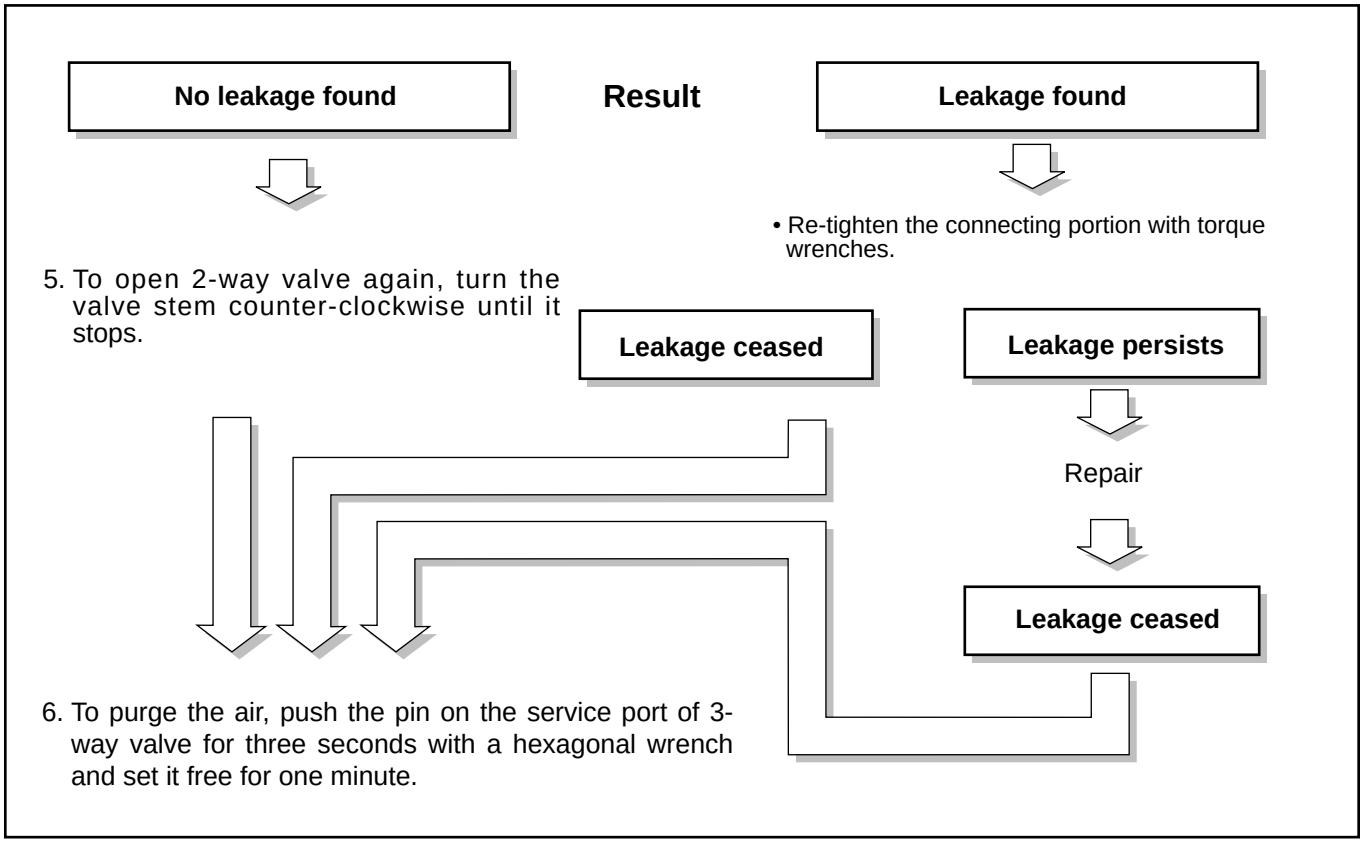
1) Air purging

The air remaining which contains moisture in the refrigeration cycle may cause a malfunction on the compressor.

1. Remove the caps from the 2-way and 3-way valves.
2. Remove the service-port cap from the 3-way valve.
3. To open the valve, turn the valve stem of 2-way valve counter-clockwise approx. 90¡ ˘and hold it there for five seconds, then close it.
4. Check a gas-leakage of the connecting portion of the pipings.

CAUTION: Do not leak the gas in the air during air purging, with vacuum pump as possible as you can.



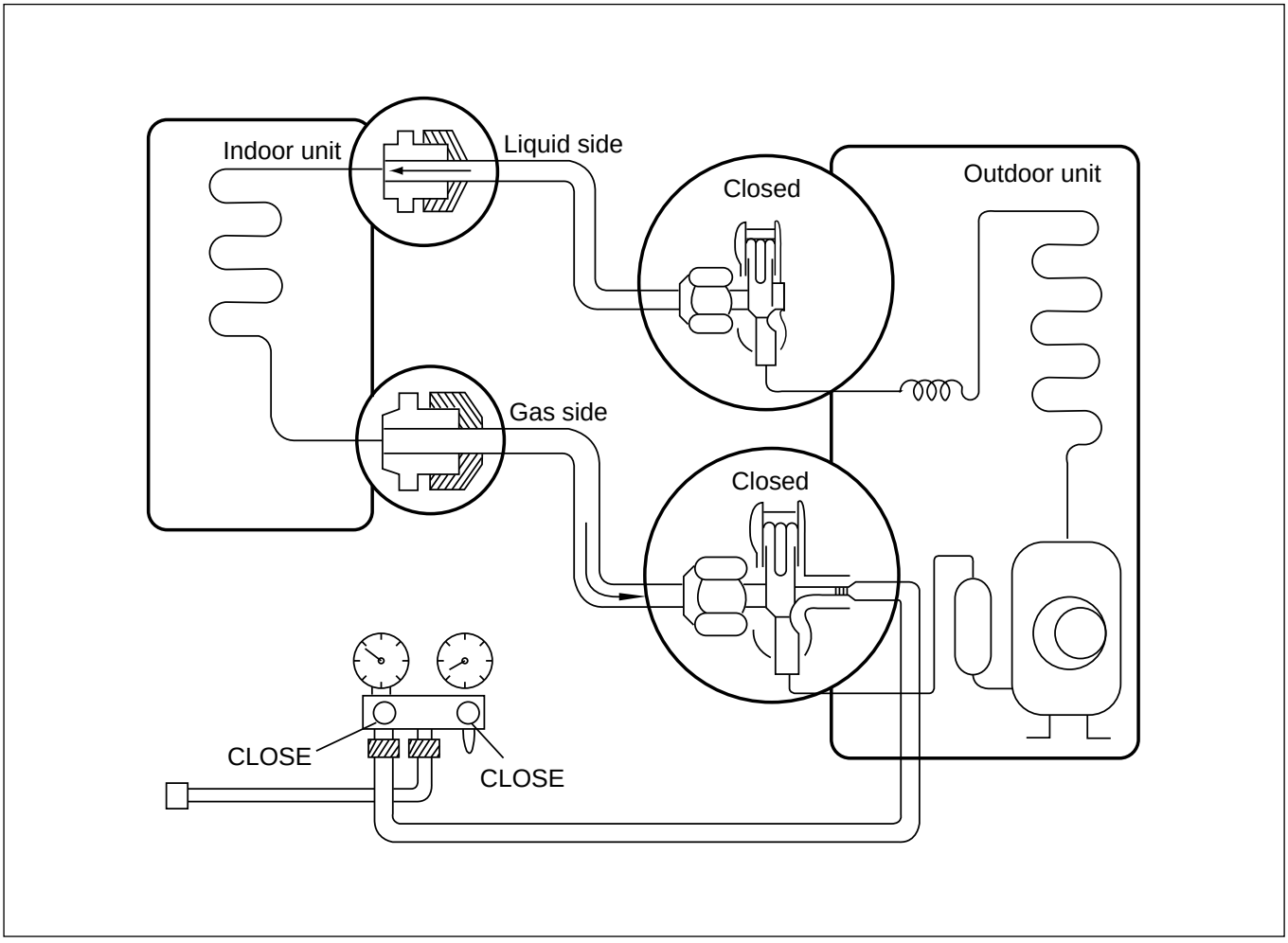

No leakage found
Result
Leakage found
• Re-tighten the connecting portion with torque wrenches.
5. To open 2-way valve again, turn the valve stem counter-clockwise until it stops.
Leakage ceased
Leakage persists
Repair
Leakage ceased
6. To purge the air, push the pin on the service port of 3-way valve for three seconds with a hexagonal wrench and set it free for one minute.

7. Set both liquid and gas side valves to open position with the Hexagonal wrench for the unit operation.

8. Checking a gas leakage

(1) Connect the manifold gauge to the service port of 3-way valve.
Measure the pressure.

(2) Keep it for 5-10 minutes.
Ensure if the pressure indicated on the gauge is as same as that of measured at first time.



NOTE:

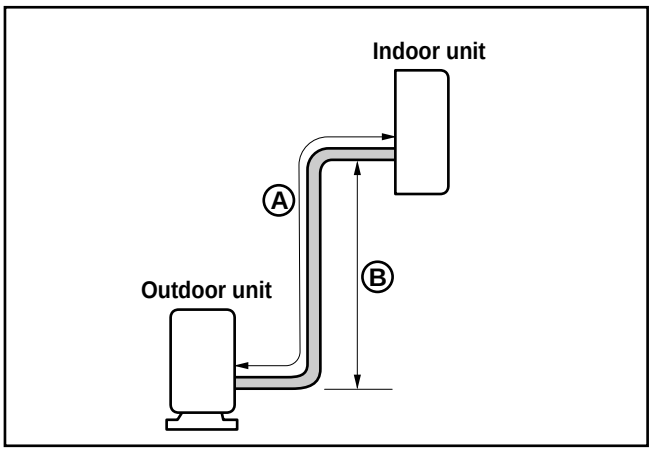
The additional gas for air purping has been charged in the outdoor unit.

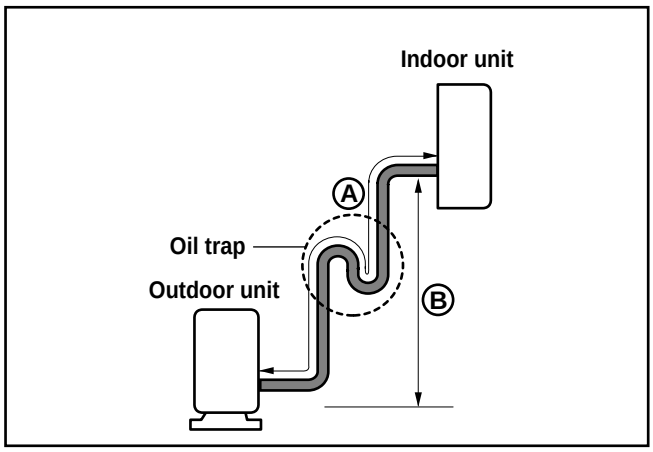
However, if the flare connections have not been done correctly and there gas leaks, a gas cylinder and the charge set will be needed.

CAUTION : Do not leak the gas in the air during air purging. Use vaccum pump as far as possible

6. Pipe length and the elevation

Capacity (Btu/h)	Max. Piping Length £ (m)	Max. Elevation £ (m)	Standard Length(m)	Additional Refrig-erant (g/m)
7~12K	15	7	5	20





In case more than 5m

CAUTION

- Capicity is based on standard length and maximum allowance length is the basis of reliability.
- **Oil trap should be installed per 5~7 meters.**
- Numerical value in "( )" is for Rotary Comp. model.

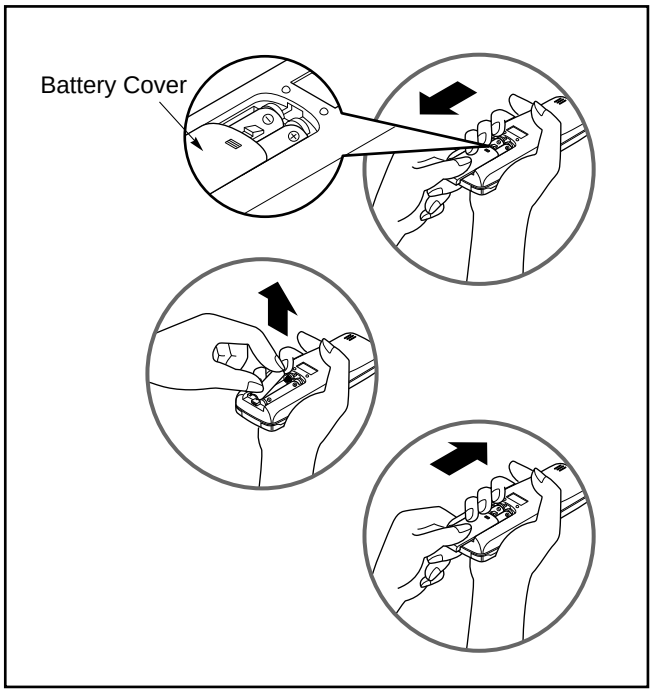
7. Test running

1) Connection of power supply

1. Connect the power supply cord to the independent power supply.
- Circuitbreaker is required.

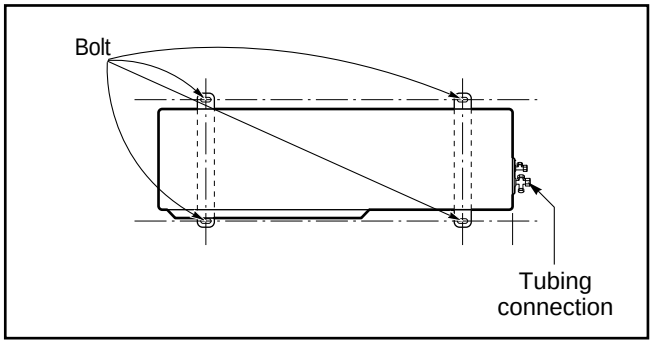
2. Prepare the remote controller.
- Insert two batteries provided.
  Remove the battery cover from the remote controller.
- Slide the cover according to the arrow direction.
  Insert two batteries.
  (Two "R03" or "AAA" dry-cell batteries or equivalent.)
- Be sure that the (+) and (-) directions are correct.
- Be sure that both batteries are new.
  Re-attach the cover.
- Slide it back into position.

3. Operate the unit for fifteen minuites or more.



Settlement of Outdoor Unit

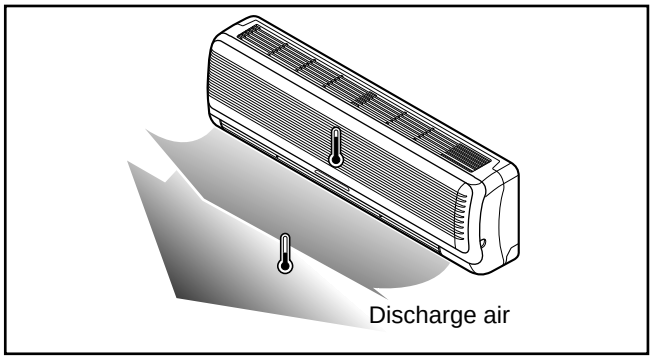
- Anchor the outdoor unit with a bolt and nut (ø10cm) tightly and horizontally on a concrete or rigid mount.
- When installing on the wall, roof or rooftop, anchor the mounting base securely with a nail or wire assuming the influence of wind and earthquake.
- In the case when the vibration of the unit is conveyed to the house, settle the unit with an anti-vibration rubber.



2) Evaluation of the performance

1. Measure the temperature of the intake and discharge air.

2. Ensure the difference between the intake temperature and the discharge one is more than 8 °C(Cooling) or reversely (Heating).



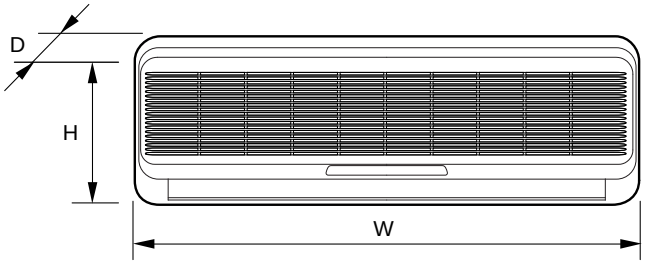
Product Specifications

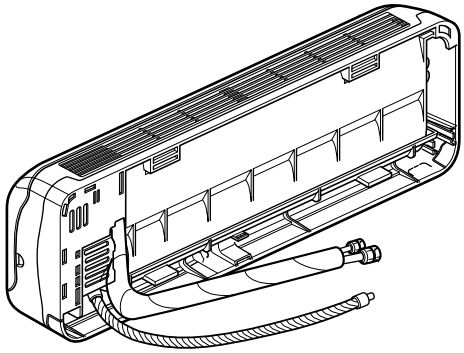
SPEC. AT 230V

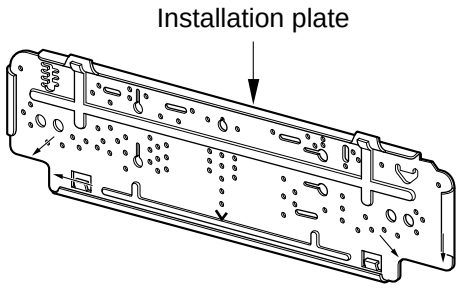
Item \ Model Name		Unit	LS-L1260CL	LS-L1260HL
Cooling Capacity		Btu/h	12,000	12,000
Heating Capacity			-	13,000
Moisture Removal		*l*/h	1.5	1.5
Power Source		Ø, V, Hz	1Ø, 220-240V, 50Hz	
Air Circulation	Indoor	m^3/min	9.5	9.5
	Outdoor		25	25
Noise Level	Indoor	dB (A) ¡ 3	36	36
	Outdoor		46	46
Input	Cooling	W	1,190	1,200
	Heating		-	1,120
Running Current	Cooling	A	5.4	5.5
	Heating		-	5.0
E.E.R.	Cooling	Btu/hW	10.1	10.0
C.O.P	Heating		-	3.4
Motor Output	Indoor	W	13	13
	Outdoor		26	26
Dimensions (W ¡ ¿H ¡ ¿D)	Indoor	mm	888 x 287 x 170	
	Outdoor		770 x 540 x 245	
Net. Weight	Indoor	kg	9	9
	Outdoor		34	35
Refrigerant (R22)		g	740	830
Airflow Direction Control (Up & Down)			§	§
Remocon Type			L.C.D Wireless	
Service Valve	Liquid	inch(mm)	1/4" (6.35)	
	Gas		1/2" (12.7)	
Sleeping Operation			§	§
Drain Hose			§	§
Connecting Cable			1.0mm^2	
Power Cord			1.0mm^2	

Dimensions

(1) Indoor Unit

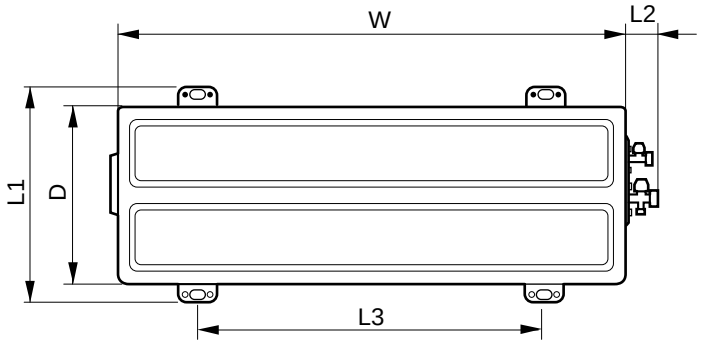


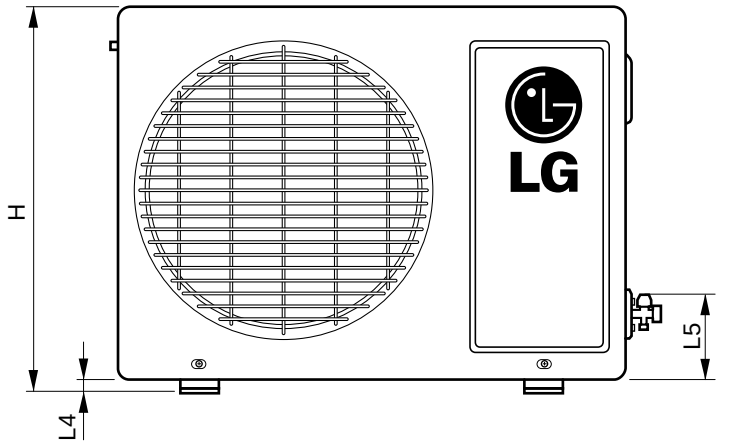


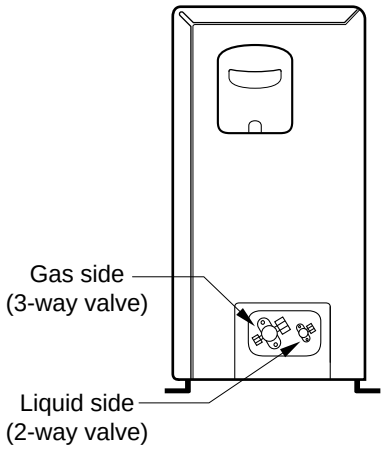


DIM \ MODEL / Unit		12K Btu Series
W	mm	888
H	mm	287
D	mm	170

(2) Outdoor Unit

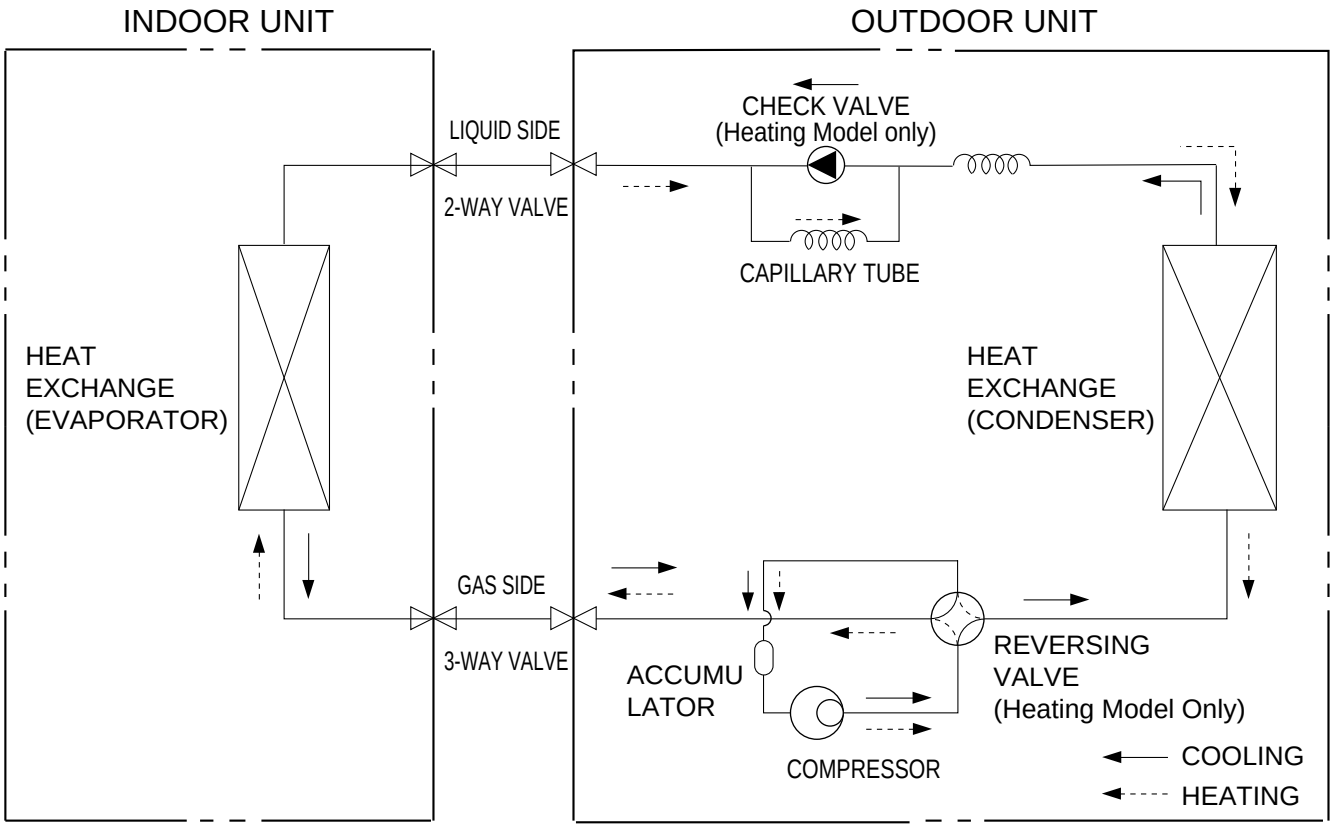






DIM / MODEL	unit	**12K Btu Series**
W	mm	770
H	mm	540
D	mm	245
L1	mm	287
L2	mm	64
L3	mm	518
L4	mm	10
L5	mm	100

Refrigeration Cycle Diagram

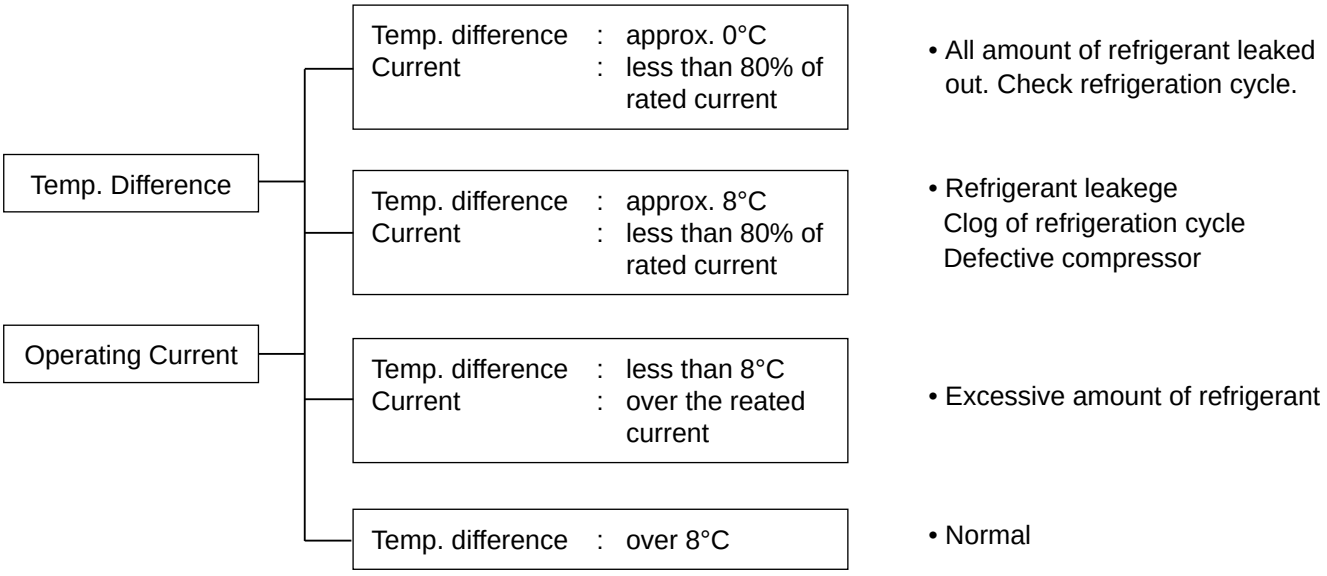


MODEL	Pipe size(Diameter:Ø)		MAX. Piping length (m)	Max Elevation (m)
	Gas(inch)	Liquid(inch)		
12K Btu SERIES	1/2"	1/4"	15	7

Cycle Troubleshooting Guide

Trouble analysis

1. Check temperature difference between intake and discharge air and operating current.


Temp. Difference
Operating Current
Temp. difference : approx. 0°C
Current : less than 80% of rated current
Temp. difference : approx. 8°C
Current : less than 80% of rated current
Temp. difference : less than 8°C
Current : over the reated current
Temp. difference : over 8°C
• All amount of refrigerant leaked out. Check refrigeration cycle.
• Refrigerant leakege
Clog of refrigeration cycle
Defective compressor
• Excessive amount of refrigerant
• Normal

Notice :
Temperature difference between intake and discharge air depends on room air humidity. When the room air humidity is relativery higher, temperature difference is smaller. When the room air humidity is relatively lower temperature difference is larger.

2. Check temperature and pressure of refrigeration cycle.

Suction pressure (Compared with the normal value)	Temperature (Compared with the normal valve)	Cause of Trouble	Description
Higher	High	Defective compressor Defective 4-way reverse valve	Current is low.
	Normal	Excessive amount of refrigerant	High pressure does not quickly rise at the beginning of operation.
Lower	Higher	Insufficient amount of refrigerant (Leakage) Clogging	Current is low. Current is low.

Notice :
1. The suction pressure is usually 4.5~6.0 kg/cm^{2}G(Cooling) at normal condition.
2. The temperature can be measured by attaching the thermometer to the low pressure tubing and wrap it with putty.

Electronic Parts Troubleshooting Guide

1. Product does not operate at all.
(* Refer to Electronic Control Device drawing and Schematic diagram.)

Turn off Main Power

(After 10 seconds)

Turn on Main Power

Does "beeping" sound is made from the Indoor Unit?

NO

Check the voltage of power(About AC 220V/AC240V, 50Hz)

- Main power's voltage
- Voltage applied to the unit
- Connecting method of Indoor/Outdoor connecting cable
- Check PWB Ass'y
  - Fuse
  - Pattern damage
  - Varistor(ZNR01J)

Check the connection housing for contacting

- Connector related to CN-POWER
- Connector related to CN-MOTOR
- Connector contacting of Outdoor Fan/Compressor
- Display PWB Ass'y Check

YES

Primarily, the operating condition of Micom is OK.

Check each load(Indoor/Outdoor Fan Motor, Compressor, Stepping Motor) and contacting condition of related connector

PCB Board Operation Check		
Items	Content	Remedy
• Power Transformer (Indoor unit) - Input Voltage - Output Voltage ‹X	- About AC220V/240V±10% - Check the power voltage - About AC14±3V	• Replace Trans
• IC01D(7812) Output (Indoor/Outdoor unit) ‹X	• DC +12V	• Replace IC01D
• IC02D(7805) Output (Indoor/Outdoor unit) ‹X	• DC +5V	• Replace IC02D
• IC01A(KIA7036, Reset IC) X01(8MHz)	• Voltage of Micom No. 2, (DC +4.5V over) and Soldering condition.	• Replace faulty parts

2. The product is not operate with the remote control.

Turn on Main Power

While the compressor has been stopped, the compressor does not operate owing to the delaying function for 3 minutes after stopped.

When the compressor stopped Indoor Fan is driven by a low speed. At this point the wind speed is not controlled by the remote controller. (When operated in the Sleeping Mode, the wind speed is set to the low speed by force.)

Cause by the remote control

When the mark( ) is displayed in LCD screen, replace battery.

Check the connecting circuit between the remote controller MICOM (No. §) - R17(2Ω) - IR LED - TR - R16(2.2KΩ).

Caused by other parts except the remote control

Check the contact of CN-DISP1 connector.

Check DISP PWB Ass'y
- Voltage between CN DISP1 ¤ - ¤ : DC +5V

Check point

- Check the connecting circuit between PIN¤Ł- R01L(1K) - C01L(680PF) - MICOM PIN
- Check Receiver Ass'y

3. Compressor/Outdoor Fan are unable to drive.

Turn on Main Power

Operate "Cooling Mode(❋)" by setting the desired temperature of the remote controller is less than one of the indoor temperature by 1°C at least.

When in Air Circulation Mode, Compressor/Outdoor Fan is stopped.

Check the sensor for indoor temperature is attached as close as to be effected by the temperature of Heat Exchanger(EVA).

When the sensor circuit for indoor temperature and connector are in bad connection or are not engaged, Compressor/Outdoor Fan is stopped.

- Check the related circuit of R02H(12.1K), R01H(1.0K), R04H(6.2K), R03H(1.0K) Micom (No.3.4) (Indoor unit).
- Check the indoor temperature sensor is disconnected or not(About 10kΩ / at 25°C).

Check Relay(RY - COMP) for driving compressor.

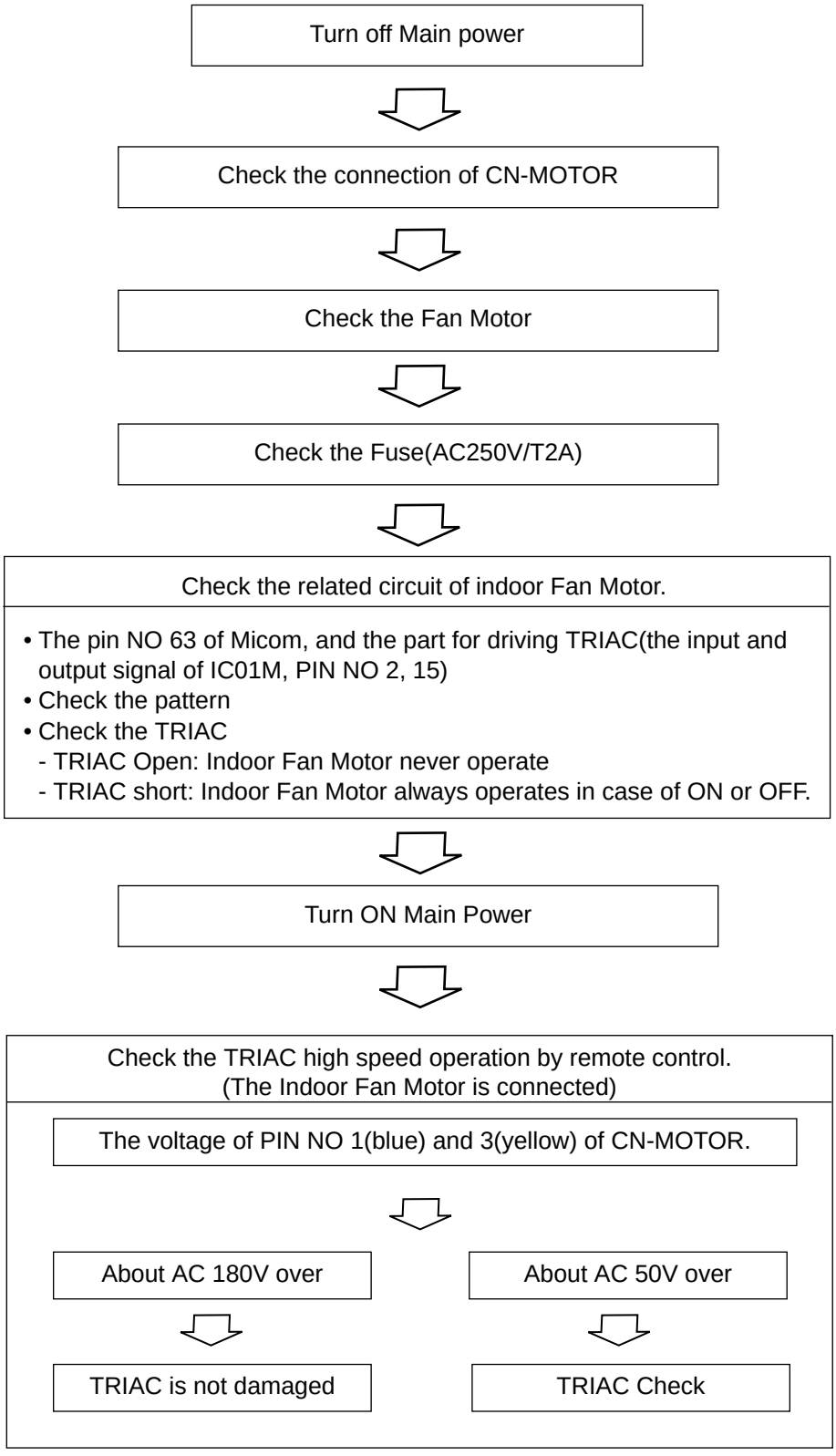
- When the power(About AC220V/240V) is applied to the connecting wire terminal support transferred to compressor, PWB Ass'y is normal.
- Check the circuit related to the relay.

Check point	COMP ON	COMP OFF
Between Micom(No. 62) and GND	DC5V	DC0V
Between IC01M(No. 14) and GND	Below DC 1V (app)	About DC12V

Turn off Main Power

- Check the electrical wiring diagram of outdoor side.
- Check the abnormal condition for the component of Compressor/Outdoor Fan Motor.
- Check the "open" or "short" of conmecting wires between indoor and outdoor.

4. When indoor Fan does not operate.


Turn off Main power
Check the connection of CN-MOTOR
Check the Fan Motor
Check the Fuse(AC250V/T2A)
Check the related circuit of indoor Fan Motor.
• The pin NO 63 of Micom, and the part for driving TRIAC(the input and output signal of IC01M, PIN NO 2, 15)
• Check the pattern
• Check the TRIAC
- TRIAC Open: Indoor Fan Motor never operate
- TRIAC short: Indoor Fan Motor always operates in case of ON or OFF.
Turn ON Main Power
Check the TRIAC high speed operation by remote control.
(The Indoor Fan Motor is connected)
The voltage of PIN NO 1(blue) and 3(yellow) of CN-MOTOR.
About AC 180V over
About AC 50V over
TRIAC is not damaged
TRIAC Check

5. When Vertical Louver does not operate.

- Confirm that the Vertical Louver is normally geared with the shaft of Stepping Motor.
- If the regular torque is detected when rotating the Vertical Louver with hands ¢¡ Normal

⇩

- Check the connecting condition of CN-U/D Connector
- Check the soldering condition(on PWB) of CN-U/D Connector

⇩

Check the operating circuit of the Vertical Louver

- Confirm that there is DC +12V between pin¤ (RED) of CN-U/D and GND.
- Confirm that there is a soldering short at following terminals.
  - Between ⑱, ⑲, ⑳ and ㉑ of MICOM
  - Between ¤Œ, ¤º, ¤ and ¤ of IC01M
  - Between ¤ , ¤æ, ¤ and ¤ of IC01M

⇩

If there are no problems after above checks

- Confirm the assembly conditions that are catching and interfering parts in the rotation radial of the Vertical Louver

6. When Heating does not operate

Turn ON Main Power

Operate “Heating Mode(☼)” by setting the desired temperature of the remote control is higher than one of the indoor temperature by 2°C at least.

In heating Mode, the indoor fan operates in case the pipe temperature is higher than 28°C.

Check the connector of intake and pipe sensor(thermistors)

- Check the related circuit of R02H(12.1K), R01H(1.0K), R04H(6.2K), R03H(1.0K), Micom(No. 3, 4).
- Check the indoor room temperature is disconnected or not (about 10KΩ/at 25°C).
- Check the indoor pipe temperature is disconnected or not (about 5KΩ/at 25°C).

Check the DC voltage on the PWB ASS’Y

- The details of check are as followings

- Comp Relay.

Check point	Comp ON	Comp OFF
Between Micom (NO.62) and GND	DC 5V	DC 0V
Between IC01M (NO.14) and GND	Below DC 1V	About DC 12V

- Outdoor fan Relay

Check point	Fan ON	Fan OFF
Between Micom (NO.53) and GND	DC 5V	DC 0V
Between IC02M (NO.15) and GND	Below DC 1V	About DC 12V

- 4 way Relay

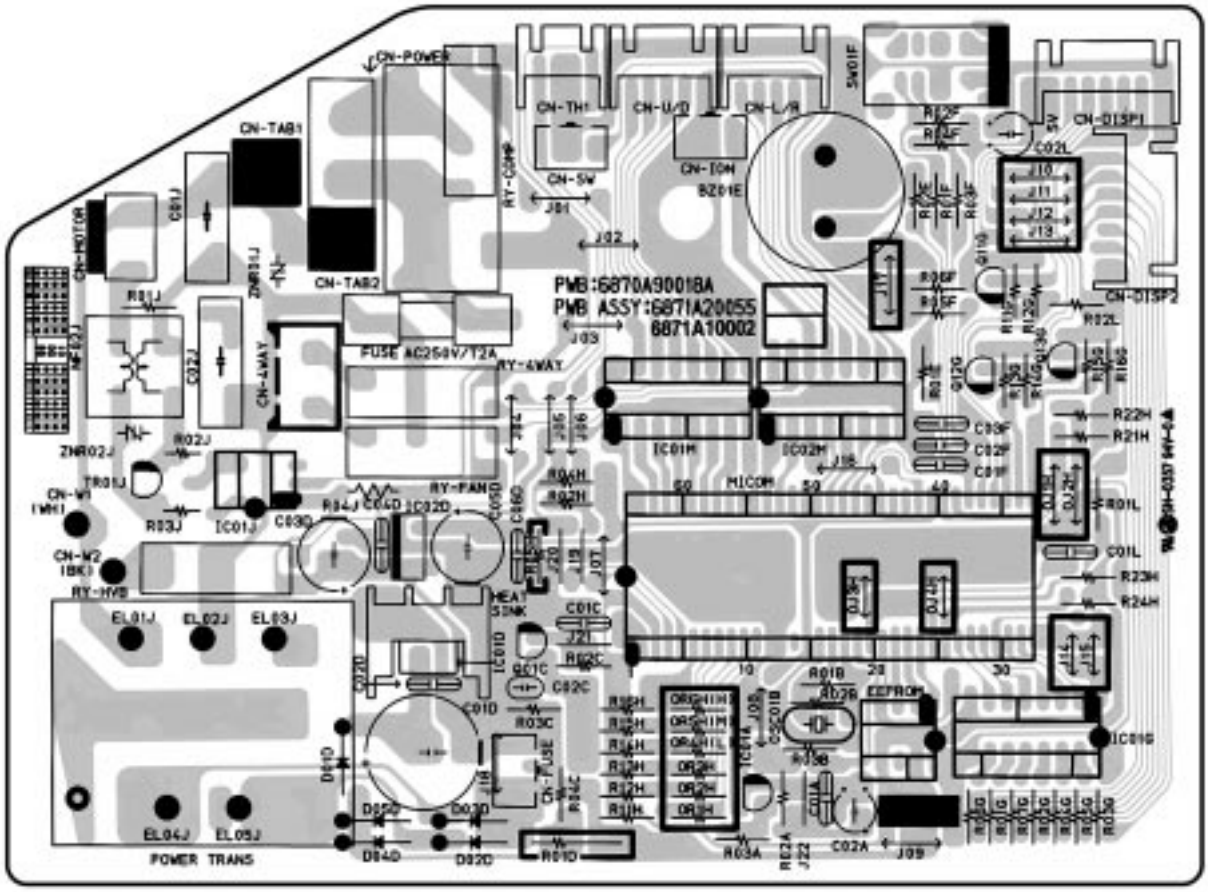
Check point	4 way ON	4 way OFF
Between Micom (NO.54) and GND	DC 5V	DC 0V
Between IC02M (NO.16) and GND	Below DC 1V	About DC 12V

Turn off Main Power

- Check the electrical wiring diagram of outdoor side.
- Check the abnormal condition for the component of Compressor/Outdoor Fan Motor, 4 way.
- Check the "open" or "short" of connecting wires between indoor and outdoor.

Electronic Control Device

(1) MAIN P.C.B ASM

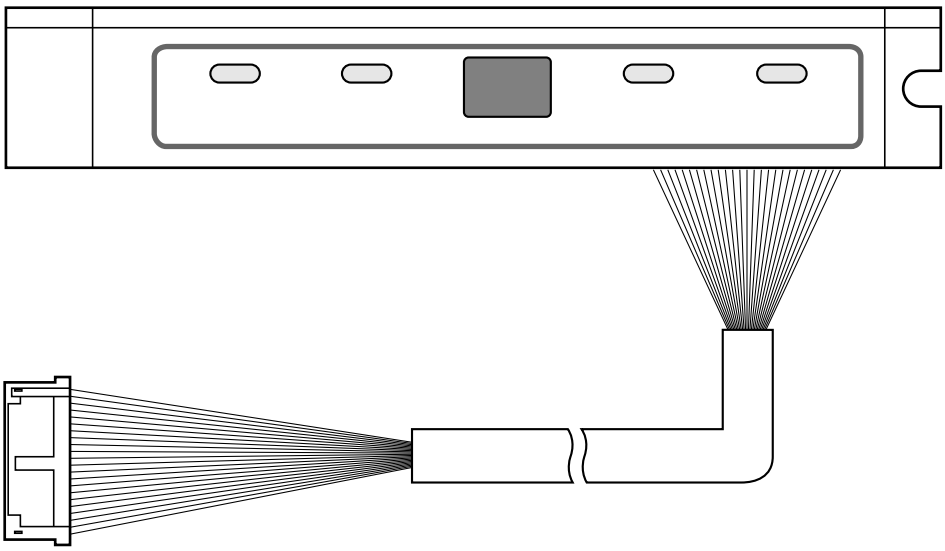


PCB ASS'Y SVC PART LIST

NO.	MODEL	P/NO	OPTIONAL FUNCTION					
			OR1H	OR2H	OR3H	OR4H	OR5H	OR6H
1	LS-L1260CL	6871A20055S	6.8K	OPEN	1K	5.1K	10K	39K
2	LS-L1260HL	6871A20055T	91K	56K	1K	5.1K	10K	39K

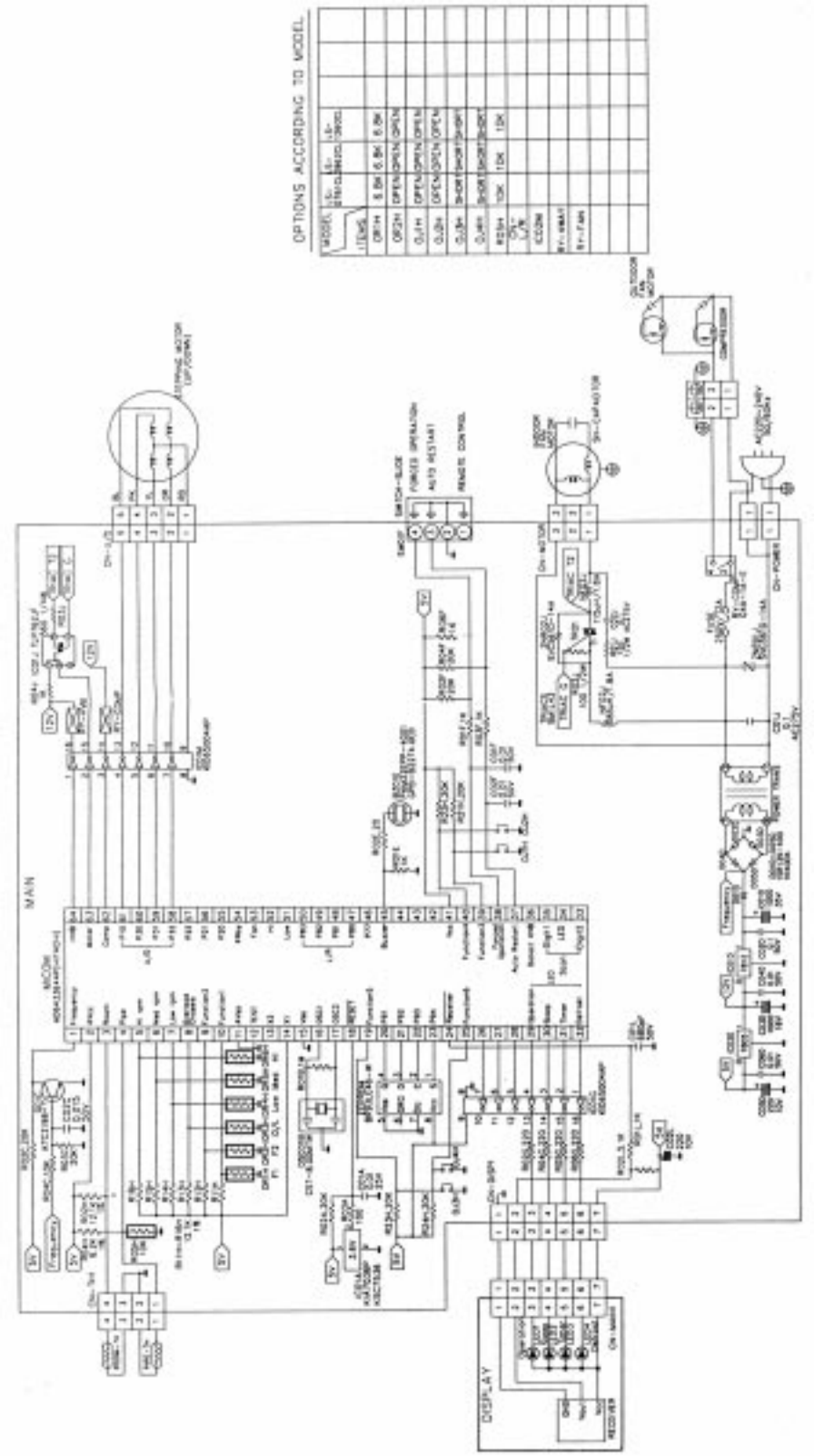
(2) Display Ass'y

- **LS-1260CL/HL(P/NO.:6871A30009C)**

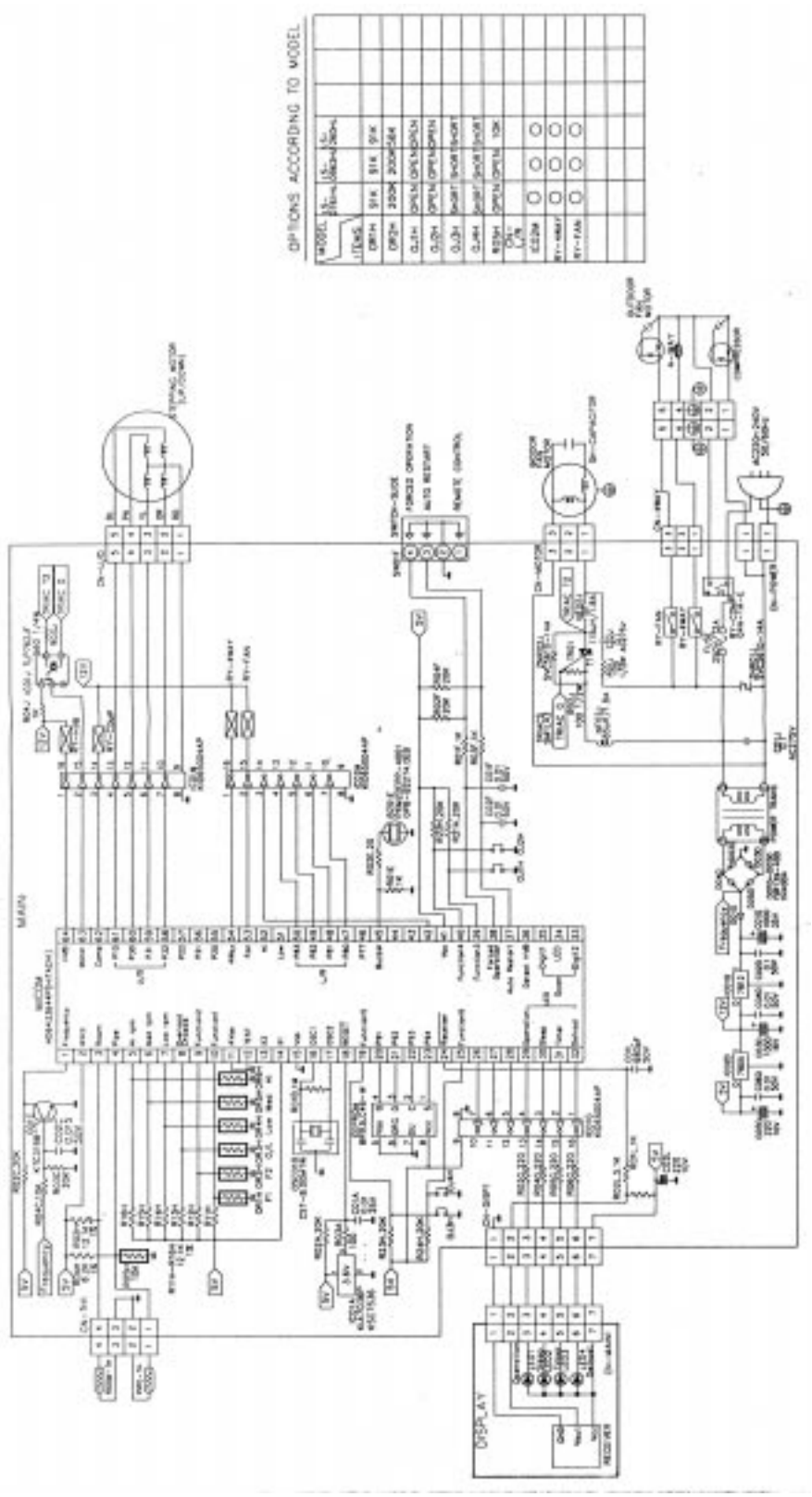


Schematic Diagram

Cooling Only Series



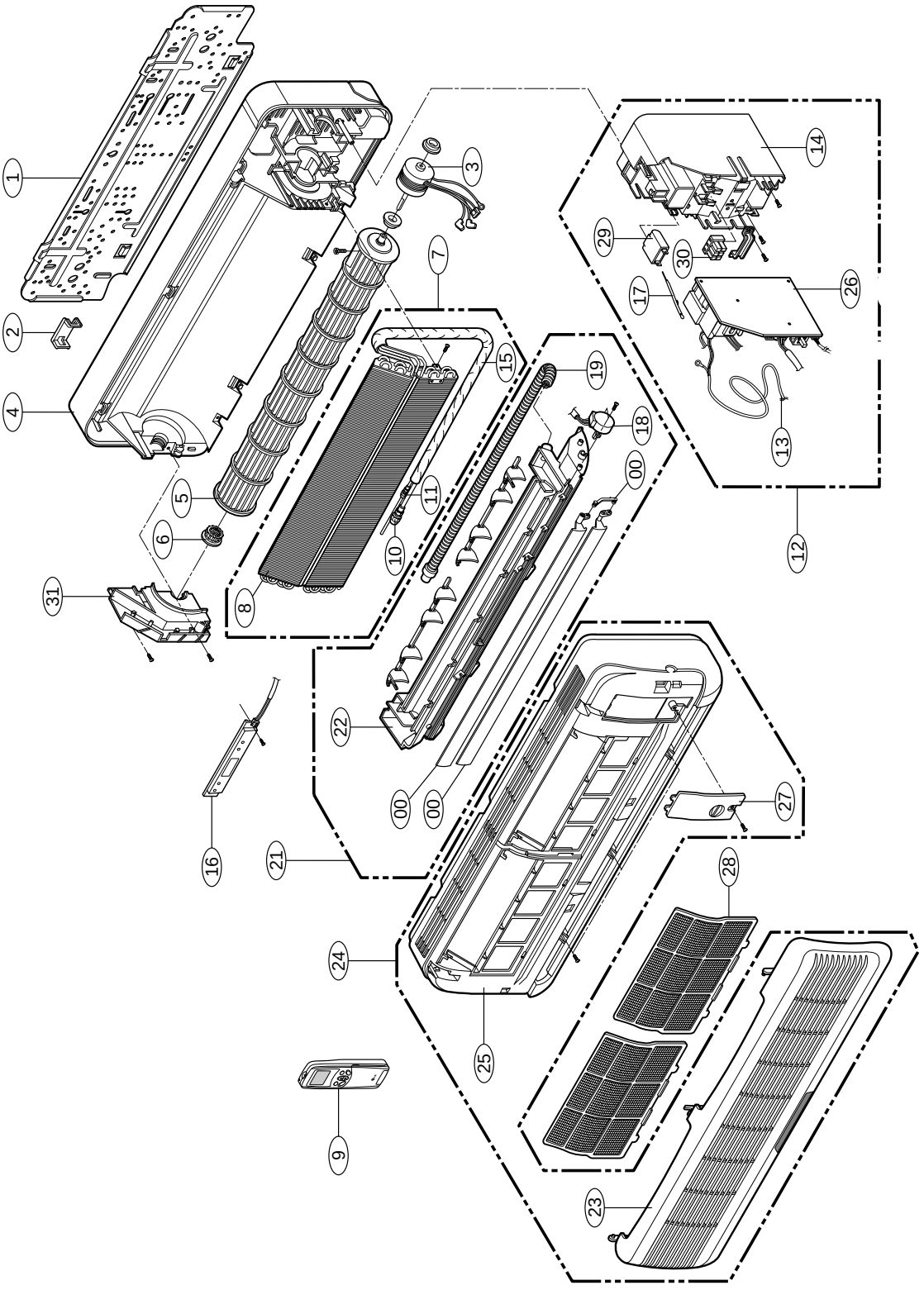
Heat Pump Series



Exploded View & Replacement Parts List

1. Indoor Unit

(1) LS-L1260CL/HL

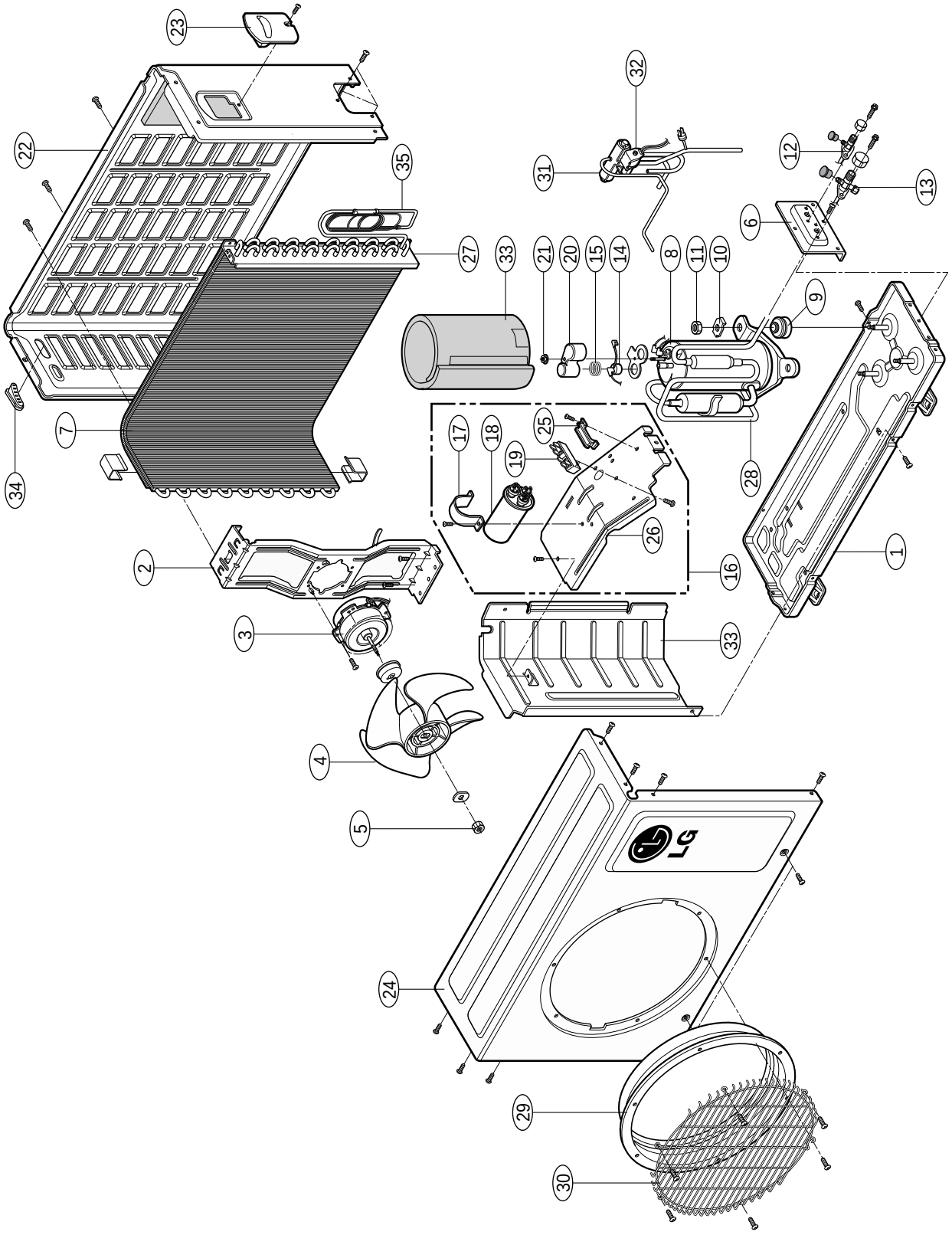


Parts List (LS-L1260CL/HL)

NO.	PART NO.	PART NAME	Q/TY		REMARKS
			LS-L1260CL	LS-L1260HL	
1	1H00843A	PLATE INSTALLATION	1	1	R
2	3H03651A	HOLDER, TUBE	1	1	
3	4681A20003P	MOTOR, BLOWER	1	1	R
4	3141A20003D	CHASSIS ASM	1	1	R
5	5901AR6141B	CROSS FLOW FAN	1	1	R
6	3H02821B	BEARING ASM	1	1	R
7	5421A20031	EVAPORATOR ASM	1E	1G	R
8	5421A20032	EVAPORATOR	1A	1B	R
9	6711A20010	REMOTE CONTROL ASM	1A	1B	R
10	3H01420A	SOCKET FLARE	1	1	
11	3A00375D	SOCKET FLARE	1	1	
12	4995A20094	CONTROLLER ASM	1A		R
	4995A20082			1A	R
13	6411A20006B	POWER CORD ASSY	1	1	R
14	4994A00001A	CONTROL BOARD	1	1	R
15	2H02449	TUBING ASM	1J	1J	R
16	6871A30009	PWB(PCB) ASSY, DISPLAY	1E	1E	R
17	6323AQ2333	THERMISTEOR ASSY	1A	1A	R
18	4681AR2727H	STEPPING MOTOR	1	1	R
19	5251AR2575A	DRAIN HOSE ASM	1	1	R
20	5990A30006A	VANE	1	1	R
	5990A30007A		1	1	R
21	3531A10023B	DISCHARGE GRILLE ASM	1	1	R
22	3530A10018A	DISCHARGE GRILLE	1	1	R
23	3531A20028	INLET GRILLE	1D	1C	R
24	3531A10024	FRONT GRILLE ASM	1E	1D	R
25	3530A10020B	FRONT GRILLE	1	1	R
26	6871A20055	PWB(PCB)ASSY, MAIN	1S	1T	R
27	3550A30035B	COVER CONTROL	1	1	
28	5230A20004A	FILTER ASSY	2	2	R
29	3H01487A	SH CAPACITOR	1	1	R
30	4H03048	PILLAR TERMINAL	1H	1J	R
31	4930AR6138A	HOLDER, EVA	1	1	R

2. Outdoor unit

LS-1260CL/HL



Parts List (LS-L1260CL/HL)

NO	PART No.	PART NAME	LS-L1260HCL	LS-L1260HL	REMARK
1	3041A20008	BASE PAN W.ASM	1D	1F	
2	4960A10002A	MOUNT MOTOR	1	1	R
3	4681A20004H	MOTOR,FAN	1	1	R
4	5901A10004A	FAN	1	1	
5	1WPA0600014	PLAIN WASHER	1	1	
5-1	4H02861A	FAN NUT	1	1	
6	4908A20006B	SUPPORT VALVE	1	1	
7	5403A20026	CONDENSER ASM	1D	1B	
8	5416A20003L	COMPRESSOR ASM	1	1	R
9	4H00982E	ANTI VIBRATION	3	3	R
10	4810AR4155	WASHER	3A	3A	
11	1NHA0801206	HEXAGON NUTS(D8.0)	3	3	
12	2H02479	SERVICE VALVE(1/4".H4)	1H	1H	R
13	2H01890	SERVICE VALVE(1/2".H4)	1L	1L	R
14	6750U-L005A	OVER LOAD PROTECTOR	1	1	R
15	4970A30009A	O.L.P SPRING	-	-	
16	4995A20083	CONTROL BOX ASM	1C	1F	
17	4H01008A	CLAMP CAPACITOR	1	1	R
18	2AH01451P	SH CAPACITOR	1	1	R
19	3A00093D	TERMINAL BLOCK	1		
	4G00103			1A	
20	3550U-L002D	TERMINAL COVER	1	1	
21	4H00947A	NUT, TERMINAL COVER	1	1	
22	3721A20026B	GRILLE REAR PANEL	1	1	
23	3551A30023	COVER CONTROL	1C	1E	
24	3721A20027	FRONT PANEL ASM	1B	1B	
25	4H01688E	BAND CORD	1	1	
26	4994A20008A	CONTROL BOX	1	1	
27	5210A2017A	TUBE DISCHARGE	1		
	5210A20184A			1	
28	5211A20134A	TUBE SUCTION	1		
	5210A30683A			1	
29	4948A20001A	ORIFICE	1	1	
30	3530A20006B	GRILLE DISCHARGE	1	1	
31	5211A20140A	REVERSING VALVE ASM	-	1	
32	3A02028Y	REVERSING COIL	-	1	
33	3096A30010A	SOUND PROOF	1	1	
34	3H03168D	HANDLE	1	1	R
35	5211A20133B	CAPILLARY FINAL ASSY	1		R
	5211A20141A			1	R

* NOTE: ( ) is for LGEAP

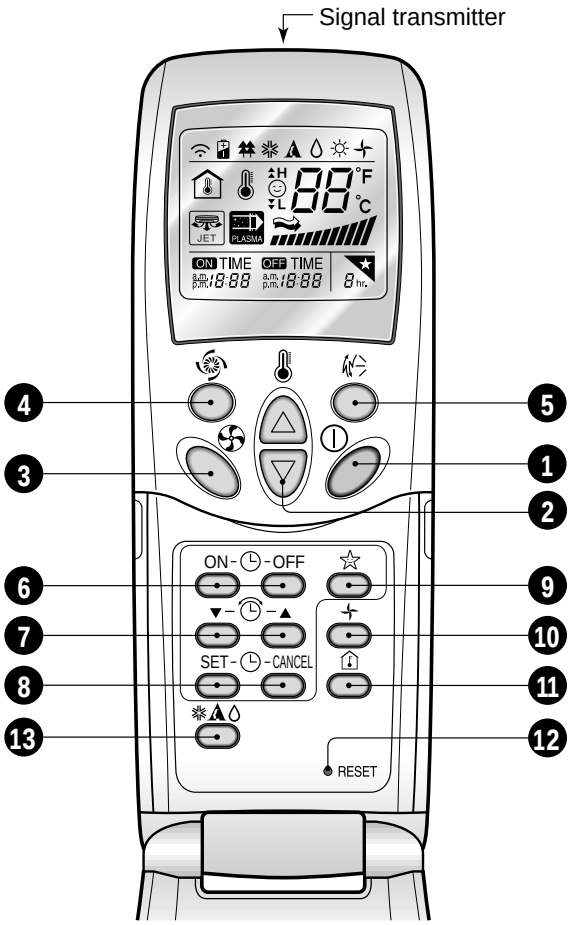
Operation

(1) Name and Function-Remote Control (Cooling Models)

Remote Control

Signal transmitter

Transmits the signals
to the room air conditioner.



1 START/STOP BUTTON
Operation starts when this button is pressed and stops when the button is pressed again.

2 ROOM TEMPERATURE SETTING BUTTONS
Used to select the room temperature.

3 INDOOR FAN SPEED SELECTOR
Used to select fan speed in four steps low, medium, high, or CHAOS.

4 JET COOL
Used to start or stop the speed cooling. (Speed cooling operates super high fan speed in cooling mode.)

5 CHAOS SWING BUTTON
Used to stop or start louver movement and set the desired up/down airflow direction.

6 ON/OFF TIMER BUTTONS
Used to set the time of starting and stopping operation.

7 TIME SETTING BUTTONS
Used to adjust the time.

8 TIMER SET/CANCEL BUTTONS
Used to set the timer when the desired time is obtained and to cancel the Timer operation.

9 SLEEP MODE AUTO BUTTON
Used to set Sleep Mode Auto operation.

10 AIR CIRCULATION BUTTON
Used to circulate the room air without cooling or heating (turns indoor fan on/off).

11 ROOM TEMPERATURE CHECKING BUTTON
Used to check the room temperature.

12 RESET BUTTON
Used prior to resetting time or after replacing batteries.

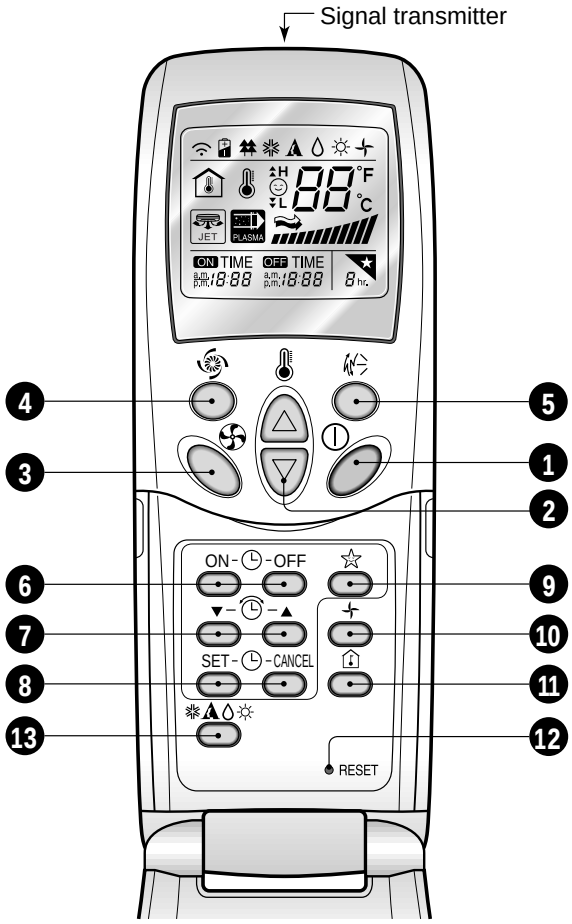
13 OPERATION MODE SELECTION BUTTON
Used to select the operation mode.

(2) Name and Function-Remote Control (Heat Pump Models)

Remote Control

Signal transmitter

Transmits the signals
to the room air conditioner.



1 START/STOP BUTTON
Operation starts when this button is pressed and stops when the button is pressed again.

2 ROOM TEMPERATURE SETTING BUTTONS
Used to select the room temperature.

3 INDOOR FAN SPEED SELECTOR
Used to select fan speed in four steps low, medium, high, or CHAOS.

4 JET COOL
Used to start or stop the speed cooling. (Speed cooling operates super high fan speed in cooling mode.)

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Used to set Sleep Mode Auto operation.

10 AIR CIRCULATION BUTTON
Used to circulate the room air without cooling or heating (turns indoor fan on/off).

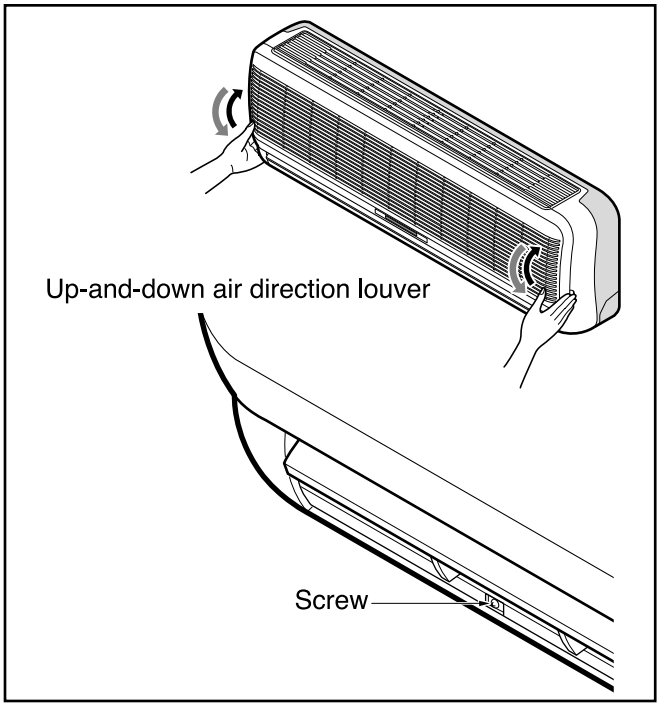
11 ROOM TEMPERATURE CHECKING BUTTON
Used to check the room temperature.

12 RESET BUTTON
Used prior to resetting time or after replacing batteries.

13 OPERATION MODE SELECTION BUTTON
Used to select the operation mode.

Disassembly of the parts (Indoor unit)

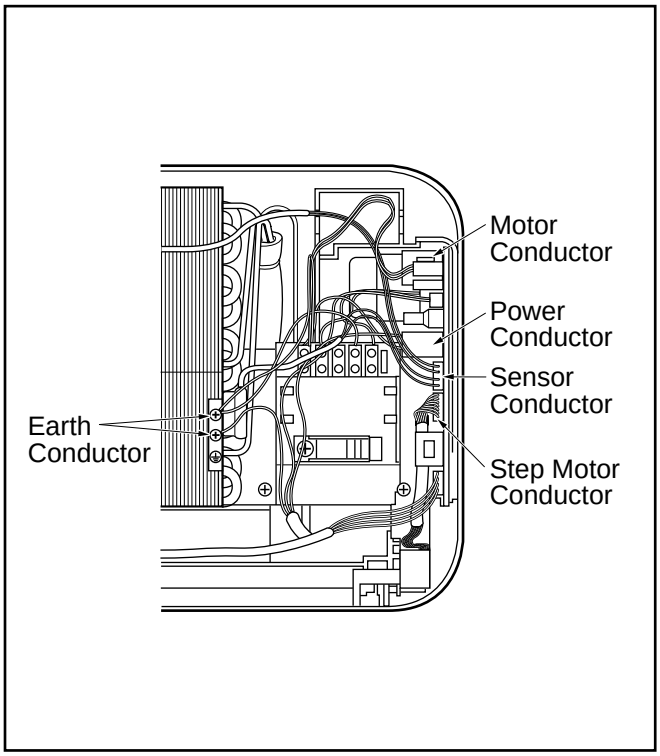
Warning :
Disconnect the unit from power supply before making any checks.
Be sure the power switch is set to “OFF”.



To remove the Grille from the Chassis.

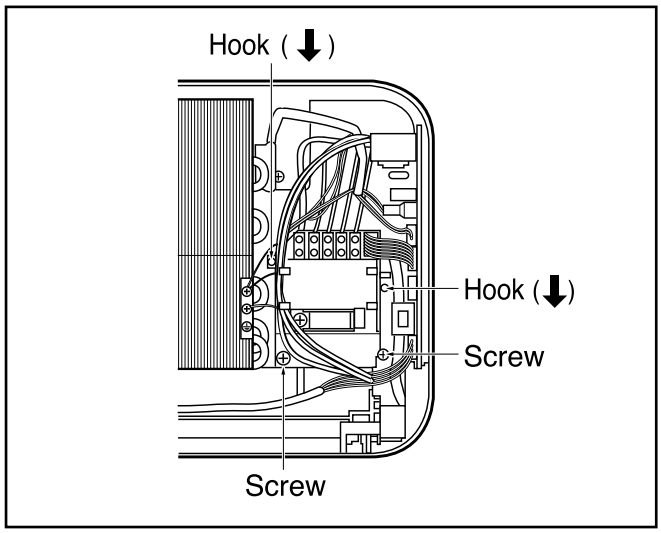
- Set the up-and-down air discharge louver to open position (horizontally) by finger pressure.
- Remove the securing screws (9K Btu models: 2EA).
- To remove the Grille, pull the lower left and right side of the grille toward you (slightly tilted) and lift it straight upward.

1. To remove the sensor, housing connect, earth conductor & step motor conductor with sensor holder, Motor, Evaporator & P.C.B.



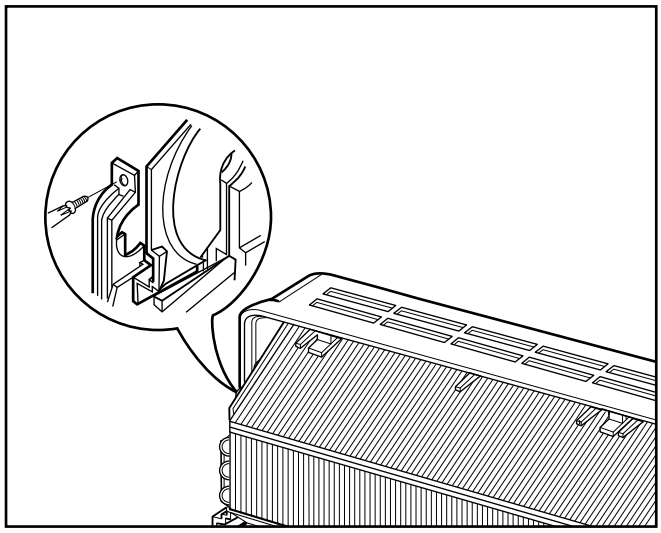
2. To remove the Control Box.

- Remove 2 securing screws.
- Pull the control box out from the chassis carefully.



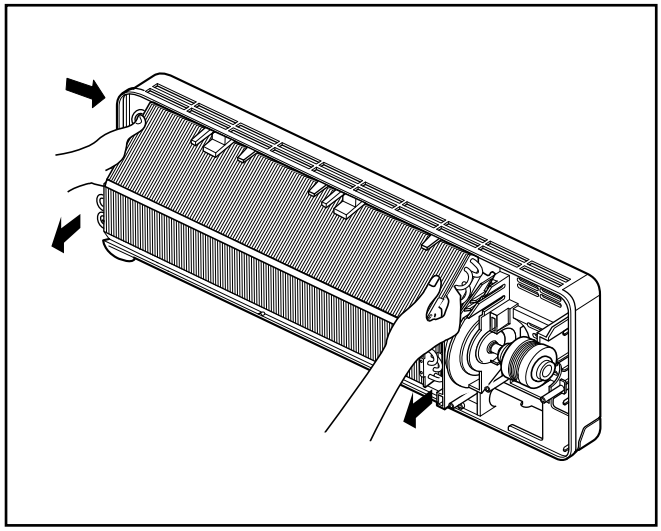
3. To remove the Discharge Grille.

- Unhook the discharge grille and pull the discharge grille out from the chassis carefully.

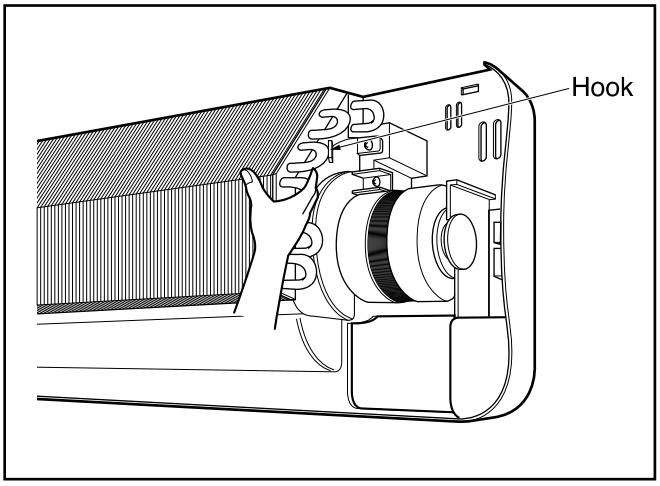


4. To remove the Evaporator.

- Remove 3 screws securing the evaporator(at the left 2EA in the Eva Holder, at the right 1EA).

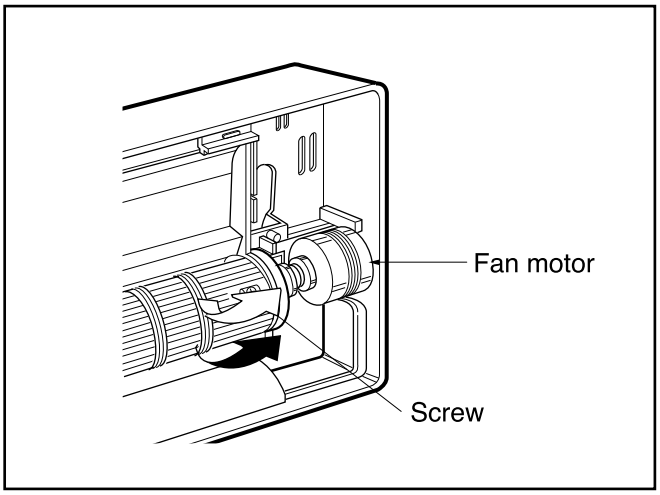


- Unhook the tab on the right inside of the chassis at the same time, slightly pull the evaporator toward you until the tab is clear of the slot.



5. To remove the Cross-Flow Fan

- Loosen the screw securing the cross-flow fan to the fan motor (do not remove).
- Lift up the right side of the cross-flow fan and the fan motor, separate the fan motor from the cross-flow fan.



- Remove the left end of the cross-flow fan from the self-aligning bearing.